



County Borough of Rochdale.

REPORT

ON

The Health of Rochdale

AND

The Medical Inspection of School Children

FOR

THE YEAR ENDING, 31st DECEMBER, 1913.

A. G. ANDERSON, M.D., D.Sc., M.A., D.P.H.,

Medical Officer of Health.

Chief School Medical Officer, and

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E. WINDLEY & Sons, Limited, Printers, Local Branch.

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Preface.

To the Chairman and Members of the Health Committee of the County Borough of Rochdale.

GENTLEMEN,

I have the honour to submit to you my Fifth Annual Report on the health and sanitary conditions of this Borough, with which is incorporated the Report on the Medical Inspection of School Children.

This Report exhibits the same form and arrangement as the previous Reports, and is divided into four sections.

Section I. is chiefly statistical and presents the essential facts relating to the marriage, birth and death-rates, and to the infantile mortality rate for the year under review. There is here also presented under the head of Census Returns on Housing Conditions, a series of Tables and other statistical matter which has been extracted and compiled from the recently issued and now available Census Returns of 1911, and from the preceding Census Returns of 1901 in so far as necessary to institute comparative Tables. The Census Returns of 1911 contain much important statistical matter which has not as hitherto been available ; and of the many lessons which may be learned from a brief study of the Tables here presented, probably none is more important than a thoughtful study of the age distribution of the population of this Borough when contrasted at the two last Census periods of 1911 and 1901. Although the population during the intercensal period had increased by 10 per cent., yet the percentage of population in 1911 at the three younger age periods was less in each case than in the previous census year 1901, while for 1911 the percentage population at the three later age periods of life is greater in each case than for the corresponding age periods of 1901. With such changes in the age distribution of the population, one must associate the cumulative effect of the continuously decreasing birth-rate, which in this Borough is amongst the lowest, when compared with the other industrial centres of England. Hence the 10 per cent. increase of population in this Borough during the past intercensal period must have been due to causes other than to the natural increase of population, that is, the excess of births over deaths for each year. As estimated in previous Reports, a large part of this increase was due to the immigration of young adults in pursuit of employment from rural areas.

Further, the progressive fall of the death-rate should be noted. The average death-rate during the past quinquennium or five years (1909-1913) has been 15.3, as compared with an average of 17.4 for the preceding five years (1904-1908). Consequently at least 190 fewer persons on an average died during each of the past five years (1909-1913) than during (1904-1908). But on a study of the Report it will be seen that this reduction in the general death-rate has been largely due to the great reduction in the infantile mortality rate, which fell from an average of 142 per annum during (1904-1908) to an average of 112 per annum during (1909-1913). That is on the basis of 2,000 births per annum, 60 fewer babies on an average died during each of the past five years than during each of the preceding five years (1904-1908).

Section II. deals with infectious diseases, and for the year under review there has to be recorded a protracted epidemic of Scarlet Fever. But the type of the disease on the whole was mild, and the case-mortality very low—less than one death per hundred cases.

Section III. presents a summary of the Departmental Work under appropriate divisions. Evidence will here be found of the great amount of work being carried on under the conversion scheme. Also there is here presented a short and probably final contribution towards the Housing problem.

Section IV. presents the Annual Report of the Medical Inspection of School Children, with its own Table of Contents ; and has been prepared by the School Medical Officer (Dr. G. Mitchell).

In conclusion I acknowledge the encouragement and support which I have received during the year from the Chairman and Members of the Health Committee, who I have no doubt cannot fail but to recognise the great increase in their work and the work of this department in recent years. For as England now appreciates that the health and physique of the people is a national asset of vital importance, every Health Committee will recognise that as a logical sequence, the definite trend of public opinion and recent legislation has for its aim and purpose to make the public health service of this Country much more effective than heretofore. But further, in the accomplishment of this most desirable purpose it must be evident to every student of public health administration, that there must be in the near future considerable re-organisation which, while greatly extending the scope and co-ordination of the different departments of the public health service, shall at the same time secure that the administration of all matters pertaining to public health in its widest sense shall be under one Authority—the Health Committee. Such an arrangement would effectively prevent the friction, wastage of time and energy and of public funds that incidentally and unavoidably arise when there is divided departmental control. The moment is thus opportune for every Health Committee, as the accredited and statutory Health Authority, to take an active part in determining the manner and scope of the re-organisation of the public health service of the future ; and should offer a strenuous opposition to the increasing tendency to create different administrative authorities ; whose duties in many cases are liable to result in friction of opinion, irresponsible delays with consequent retardation of effective, efficient and economical administration.

STAFF CHANGES.—Few changes occurred during the year under review, but during the present year Dr. T. F. S. Fulton, M.B., D.P.H., was appointed as Second Assistant Medical Officer of Health and School Medical Officer, and took up duties on 25th May, 1914.

Finally, it is my pleasant duty to acknowledge the devotion to duty and good work done by the different members of the Health Staff. To the Chief Clerk and Senior Assistant Sanitary Inspector I acknowledge the much extra time and work they give in the preparation of the Annual and other Reports, and for the willing assistance they give to meet the ever increasing variety of the work of this department.

I have the honour to be,

Gentlemen,

Your Obedient Servant,



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COUNTY BOROUGH OF ROCHDALE.

List of Local Acts and Adopted Acts in force in the Borough.

Local Acts.

- The Rochdale Waterworks Act, 1847.
- The Rochdale Improvement Act, 1853.
- The Rochdale Waterworks Act, 1866.
- The Rochdale Improvement Act, 1872.
- The Rochdale Improvement Act, 1875.
- The Rochdale Corporation Act, 1884.
- The Rochdale Corporation Water Act, 1898.
- The Rochdale Corporation Act, 1900.
- The Rochdale Corporation Act, 1908.

Adopted Acts.

- Infectious Disease (Notification) Act, 1889.
- Infectious Disease (Prevention) Act, 1890.
- Public Health Acts Amendment Act, 1890 (Parts 2, 3, 4, 5).
- The Notification of Births Act, 1907.
- Public Health Act (Amendment Act), 1907 (under consideration for adoption in whole or part).

Summary of Statistics, Year 1913.

AREA OF THE BOROUGH	...	...	...	...	...	...	...	...	acres	6,446
POPULATION (Est. 1913)—Males 43,580 ; Females 49,840	...	...	...	...	...	...	...	...		93,420
NATURAL INCREASE OF POPULATION DURING THE YEAR	...	...	...	...	...	...	...	...		504
Census 1911.	DENSITY	...	...	...	...	...	...	...	persons per acre	14·49
	NUMBER OF BUILDINGS USED AS DWELLINGS (No. Inhabited)	...	...	...	...	...	...	...		22,845
	(a) ORDINARY DWELLING HOUSES	...	...	...	...	...	...	...		21,313
	(b) OTHER BUILDINGS (Shops, Hotels, Public Houses, &c.)	...	...	...	...	...	...	...		1,532
	AVERAGE NUMBER OF PERSONS PER INHABITED DWELLING—	...	...	...	...	...	...	...
	(a) ORDINARY DWELLING HOUSES	...	...	...	...	...	...	...		3·95
	(b) ALL BUILDINGS (Including Shops, Hotels, Public Houses, &c.)	...	...	...	...	...	...	...		4·00
NO. OF MARRIAGES RECORDED IN THE REGISTRATION DISTRICT OF ROCHE DALE	...	...	...	...	...	...	...			1,023
MARRIAGE-RATE PER 1,000 OF ESTIMATED POPULATION	...	...	...	...	...	...	...			7·9
BIRTHS REGISTERED—Males 947 ; Females 991	...	...	...	...	...	...	...			1,938
BIRTH-RATE PER 1,000 OF ESTIMATED POPULATION, 1913	...	...	...	...	...	...	...			20·7
“ “ “ “ AVERAGE 10 years, 1903-1912	...	...	...	...	...	...	...			22·7
BIRTH-RATE PER 1,000 FEMALES AGED 15 TO 45 YEARS	...	...	...	...	...	...	...			7·85
DEATHS REGISTERED—Males 702 ; Females 732	...	...	...	...	...	...	...			1,434
DEATH-RATE (ALL CAUSES) PER 1,000 OF ESTIMATED POPULATION, YEAR 1913	...	...	...	...	...	...	...			15·4
“ “ “ “ AVERAGE 10 years 1903-1912	...	...	...	...	...	...	...			16·6
SEVEN ZYMOTIC DISEASES—DEATH-RATE PER 1,000 OF POPULATION	...	...	...	...	...	...	...			0·82
RESPIRATORY DISEASES (Excluding Phthisis)—Death-rate per 1,000 of Population			2·59
PHTHISIS			1·10
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SECTION I.

General and Vital Statistics.

POPULATION.

The estimated population of the Borough of Rochdale to the middle of 1913 was 93,420 ; males 43,580, females 49,840 ; and this figure is the one used by the Registrar General and has been used throughout this report for purposes of calculating the birth, death and sickness rates. Compared with the estimate for the year 1912 there is an increase of 890. The actual Census figures were 91,428 ; males 42,653, females 48,775. The natural increase of population—births over deaths, was 504.

Age Distribution.

The following Table shows the age distribution of the population estimated on the assumption that the age constitution of the population at the Census 1911 has remained unchanged, together with the actual Census figures of 1901 and 1911.

Age Period	Census Figures				Estimate 1913	
	Census 1901	Per-centage	Census 1911	Per-centage	Number	Per-centage
Under 5 years	8,413	10.12	8,617	9.42	8,800	9.42
5—15 years	15,287	18.39	16,455	18.00	16,816	18.00
15—25 „	16,362	19.69	15,957	17.46	16,311	17.46
25—45 „	26,479	31.87	30,316	33.16	30,978	33.16
45—65 „	13,547	16.29	16,261	17.78	16,610	17.78
Over 65 years	3,026	3.64	3,822	4.18	3,905	4.18
TOTALS	83,114	100.00	91,428	100.00	93,420	100.00

The proportion of persons enumerated at the Census 1911 at the ages up to 25 years shows a decrease compared with the figures of 1901 Census, and chiefly at ages 15-25 years, while at the higher ages there is a corresponding increase chiefly at ages 25-45 years.

AREA.

The Borough extends over an area of 6,446 acres, and the density is 14.49 persons per acre. The area and number of persons per acre in the different wards of the Borough is shown in the accompanying Table II.

HOUSING.

The following Table showing the number of houses erected in the different wards of the Borough during the past five years has been compiled from figures kindly supplied by the Borough Surveyor.

TABLE I.

WARD	Houses Erected				
	1913	1912	1911	1910	1909
CASTLETON EAST	18	38	28	19	98
CASTLETON SOUTH	76	10	17	32	43
CASTLETON NORTH .....	...	6	2	1	9
CASTLETON WEST	13	27	22	56	60
CASTLETON MOOR	27	30	61	48	51
SPOTLAND EAST .....	...	...	2	8	1
SPOTLAND WEST	56	32	19	44	36
WARDLEWORTH EAST	19	22	39	26	8
WARDLEWORTH WEST	3	6	11	21	33
WARDLEWORTH SOUTH .....	...	...	6	1	7
WUERDLE	7	44	27	8	25
THE BOROUGH.....	219	215	234	264	371

The average number of houses erected during the past five years 1909-1913 was thus 261, and for the preceding five years 1904-1908 the average was slightly less—253.

CENSUS RETURNS ON HOUSING CONDITIONS.

The Census returns of 1911, some of the volumes of which are only recently issued, furnish some interesting information as regards the present housing conditions in the different towns of England and Wales.

The following Tables have therefore been compiled to show these conditions in Rochdale compared with Lancashire, the County Boroughs, and England and Wales as a whole.

Tenements.

According to the Census, volume viii., a dwelling or tenement is defined as “ a place in which any person entitled to receive a schedule usually lives.” The persons entitled to receive a schedule included “ every head of a family occupying the whole or part of a house or flat ” ; every separate lodger occupying a room or rooms in a house or flat (where two or more lodgers shared a room or rooms, they were treated for census purposes as a single family), etc.

The Table below shows the number of dwellings or tenements of each size in comparison with the corresponding figures from the Census of 1901.

No. of Rooms per Tenement	No. of Tenements		Percentage of Total Tenements		Population		Percentage of Total Population
	Census 1901	Census 1911	Census 1901	Census 1911	Census 1901	*Census 1911	Census 1911
1	127	131	0.6	0.6	232	223	0.2
2	3,168	2,944	15.7	12.9	9,220	8,186	9.1
3	1,336	2,158	6.6	9.4	4,978	7,442	8.3
4	9,414	11,364	46.5	49.6	38,483	43,976	48.9
5 or more	6,188	6,303	30.6	27.5	...	30,134	33.5
TOTAL	20,233	22,900	100.0	100.0	†	89,961	100.0

* Excluding persons resident in public and other institutions.

† Complete figures not available.

The following is an extract from the Return of 1911 :—

“ For the first time, a definition of the term ‘ room ’ was attempted, the instruction “ on the schedule reading : ‘ Count the kitchen as a room, but do not count scullery, landing, “ lobby, closet, bathroom, nor warehouse, office, shop.’

“ At the Census 1901 the absence of any definition of the term ‘ Room ’ must have “ led to some amount of understatement.”

The actual number of dwellings—inhabited and uninhabited—at the time of Census 1901 and 1911 were :—

	1911	1901
Number inhabited	22,845	20,191
Number uninhabited	652	1,900*
Being built	105	170

* This figure includes 1,077 not in occupation—lock-up shops, offices, warehouses, etc.

In the following Table Rochdale is shown as having nearly 50 per cent. of dwellings with four rooms, 17 per cent. with five rooms, and only about 10 per cent. of the dwellings have more than five rooms.

One significant feature in the comparisons below is that Rochdale has almost double the percentage of four-roomed houses when compared with County Boroughs and with England and Wales, while in the larger houses the percentage is correspondingly less.

Percentage of Tenements of various sizes in the Occupation of Private Families.

	Number of Rooms per Tenement or Dwelling									
	1	2	3	4	5	6	7	8	9	10 Rooms & over
ROCHDALE	0·6	12·9	9·4	49·6	17·1	5·4	2·0	1·2	0·7	1·1
Total of County Boroughs	2·7	7·9	14·4	26·5	21·4	15·1	5·3	2·9	1·5	2·3
*County of Lancashire...	0·4	3·4	7·5	42·3	24·9	10·1	4·5	2·9	1·4	2·6
England and Wales ...	3·2	8·3	13·9	25·0	20·7	13·7	5·9	3·5	2·0	3·8

* The figures for the County exclude those for the County Boroughs.

Number of Persons in Tenements of different sizes.

The following figures show the proportion of the population which are housed in the different sized dwellings, and also the average number of occupants per room in each tenement.

Nearly 70 per cent. of the population of Rochdale are recorded as living in four and five-roomed houses, while the percentage for the whole of England and Wales is 47.

No. of Rooms per Tenement	Proportion per 100 Persons enumerated in Tenements				*Average Number of Occupants per Room in Tenements			
	Rochdale	Total of County Boroughs	†County of Lancashire	England and Wales	Rochdale	Total of County Boroughs	†County of Lancashire	England and Wales
1	0.2	1.2	0.2	1.4	1.70	2.00	1.79	1.90
2	9.1	5.8	2.2	6.1	1.39	1.61	1.42	1.59
3	8.3	13.5	6.5	12.8	1.15	1.38	1.29	1.33
4	48.9	26.2	39.9	24.7	0.97	1.09	1.05	1.08
5	20.7	23.3	27.0	22.4	0.95	0.96	0.97	0.95
6	6.6	16.3	11.2	14.8	0.81	0.79	0.82	0.78
7	2.5	5.8	4.8	6.4	0.69	0.69	0.68	0.68
8	1.5	3.2	3.2	4.0	0.58	0.62	0.62	0.61
9	0.8	1.7	1.7	2.3	0.52	0.57	0.57	0.56
10 Rooms ... and over	1.4	3.0	3.3	5.1	0.97	0.98	0.95	0.95

† Excluding figures for County Boroughs.

*Tenements in occupation of private families.

Room Accommodation.

An average of over two persons per room is regarded throughout the Returns as a state of overcrowding, and on this basis the following Table shows that in Rochdale 71 per 1,000 or 7 per cent. of the population of Rochdale are living in overcrowded houses. The corresponding figure for the whole of the County Boroughs of England and Wales is given as 94 per 1,000 or 9.4 per cent. of the population, and for the whole of England and Wales the figure is 91 or 9.1 per cent.

				Proportion per 1,000 persons enumerated in Tenements having the following number of occupants per room								
				Up to and including half	Over half but less than one	One person per Room	Over 1 but not over 1½	Over 1½ but not over 2	Over 2 but not over 2½	Over 2½ but not over 3	Over 3 but not over 4	4 and over
ROCHDALE				102	210	192	261	150	46	18	4	3
*County of Lancaster				94	223	164	263	160	44	15	3	1
Total of County Boroughs				90	216	155	245	170	51	28	7	8
England and Wales				97	220	150	232	159	48	28	8	7

* The figures for the County exclude those for the County Boroughs.

Sizes of Families.

The 22,900 private families enumerated in Rochdale have been divided up according to size of the family, and the figures are given below.

The Table should be read thus :—The 2,944 families living in two-roomed houses include 585 of one person each, 937 of two persons each, 649 of three persons each and so on.

Number of Rooms per Tenement				Number of Persons in Private Families (or Tenements)										Total Number of Private Families	Popula- tion		
				1	2	3	4	5	6	7	8	9	10			11 & up	
				Number of Private Families													
1	...	...	...	69	42	13	4	3	...	...	...	...	...	...	131	223
2	...	...	...	585	937	649	376	216	117	36	17	4	7	...	2,944	8,186
3	...	...	...	154	574	550	391	221	141	75	30	14	4	4	2,158	7,442
4	...	...	...	310	2474	2856	2313	1501	890	492	280	158	52	38	11,364	43,976
Total 1 to 4				...	1118	4027	4068	3084	1941	1148	603	327	176	63	42	16,597	59,827
5	...	...	...	56	492	700	814	648	435	326	200	124	76	53	3,924	18,611
6	...	...	...	17	159	235	232	177	132	112	45	57	30	32	1,228	5,966
7	...	...	...	5	54	98	85	79	48	38	23	13	11	10	464	2,226
8	...	...	...	3	28	59	65	47	39	17	17	6	4	1	286	1,326
9	...	...	...	4	14	27	30	32	22	14	3	2	2	2	152	711
10 and upwards				...	1	15	34	53	50	36	28	15	5	10	2	249	1,294
TOTALS				...	1204	4789	5221	4363	2974	1860	1138	630	383	196	142	22,900	*89,961
Percentages				...	5.2	20.9	22.8	19.0	13.0	8.1	5.0	2.8	1.7	0.9	0.6

* Total population in private families only. The total population enumerated is 91,428.

According to these figures the families in Rochdale of less than 4 persons represent 49 per cent., while the families of 4 to 6 persons and over 6 persons represent 40 per cent. and 11 per cent. respectively of the total private families.

In Volume VIII. of the Returns, Rochdale is shown as one of the seven towns of England and Wales (County Boroughs and large towns) having the highest percentage of families of less than 4 persons (48.8 per cent.), and as one of the eight towns having the lowest percentage of families of over 6 persons (11 per cent.).

MARRIAGES.

In the Rochdale Registration district, which includes the five surrounding districts of Norden, Littleborough, Milnrow, Wardle and Whitworth, as well as Rochdale borough, with an aggregate population of 129,000, the number of marriages recorded were 1,023, equal to a marriage-rate of 7.9 per 1,000 of population, as against 7.9 per 1,000 in 1912 and 8.3 per 1,000 during 1911.

The marriages recorded in England and Wales during the same period were equal to a marriage-rate of 15.5 per 1,000 of population.

BIRTHS.

1,938 births (947 males, and 991 females) have been registered during 1913 as belonging to Rochdale; 1,917 of these occurred within the Borough, and the remaining 21 outside the Borough—all except 1 occurred in Dearnley Workhouse. These 1,938 births may be classed as follows in comparison with the figures for the preceding two years.

Year	Total No. of Births	Males	Females	Legitimate	Illegitimate	*No. of Inward Transfers
1911	1,920	951	969	1,813	107	22
1912	1,879	924	955	1,810	69	19
1913	1,938	947	991	1,832	106	21

* Births returned by Registrar General as having occurred outside the Borough, but belonging to Rochdale.

The birth-rate for 1913 is thus 20·7 per 1,000 of the population, being 0·4 per 1,000 above the rate in 1912 and 2·0 per 1,000 below the average birth-rate in Rochdale during the past ten years 1903-1912 (22·7 per 1,000). The rate for last year 1912 was the lowest on record for this Borough.

Compared with the ten neighbouring manufacturing towns, as shown in Table V., Rochdale is below the average by 3·3 per 1,000. The rates range from 32·2 per 1,000 in St. Helens to 18·3 per 1,000 in Halifax, which is the only town except Huddersfield with a lower birth-rate than Rochdale. For the whole of England and Wales the birth-rate during 1913 was 23·9 per 1,000 of population—0·1 per 1,000 above the rate in 1912, but lower than the rate in any other year on record. In the 96 Great Towns of England and Wales the rate was 25·1 per 1,000, which is above the rate for Rochdale by 4·4 per 1,000.

For the different quarters of the past year the number of births with their equivalent rate per 1,000 of population are shown below in comparison with the two preceding years.

Quarter ending	No. of Births Registered			Equivalent Annual Birth-rate per 1,000 of Population		
	1913	1912	1911	1913	1912	1911
March 31st ...	489	509	487	21·2	22·3	21·3
June 30th ...	490	479	491	21·0	20·8	21·5
September 30th ...	481	455	472	20·4	19·6	20·4
December 31st ...	477	436	469	20·3	18·7	20·3

The following Table II. shows the number of births and birth-rate for each ward of the Borough during the past year. The highest rate was in Wardleworth East Ward 27·2 per 1,000; and this ward had also the highest rate of any for the preceding year 1912, with 25·4 per 1,000. Three other wards had a higher rate than that recorded for the whole Borough. The lowest rate was 17·5 in Spotland East, Castleton West coming next with 17·8 per 1,000.

TABLE II.

Chief Vital Statistics of each Ward of the Borough, 1913.

DISTRICT.	Popu- lation. (Est. to middle of 1913.)	Acre- age.	Density per Acre.	Births Regist'd	Deaths.						Rate per 1,000 of Est. Population.				
					Total.	Under one year of age.	From 7 Prin- cipal Zy- motic Dis- eases.	From Respi- ratory Dis- eases.	From Ph- thisis.	Infantile Mortality per 1000 Births Registered.	Births.	Deaths.	From 7 Prin- cipal Zy- motic Dis- eases.	From Respi- ratory Dis- eases.	From Ph- thisis.
THE BOROUGH ...	93420	6446	14.49	1938	1434	206	77	242	103	106	20.7	15.4	0.82	2.59	1.10
Castleton East Ward	11548	471	24.52	263	207	38	14	35	16	144	22.8	17.9	1.21	3.03	1.39
„ South „	11180	439	25.47	213	139	16	6	29	9	75	19.1	12.4	0.54	2.59	†0.81
„ North „	4722	263	17.95	93	90	10	8	14	4	108	19.7	†19.1	†1.69	2.96	0.85
„ West „	9920	394	25.18	177	117	9	3	25	9	†51	17.8	†11.8	†0.30	2.52	0.91
„ Moor „	9546	2261	4.22	198	118	24	6	11	10	121	20.7	12.4	0.63	†1.15	1.05
Spotland East ...	7260	676	10.74	127	102	11	...	16	6	87	†17.5	14.0	...	2.20	0.83
„ West ...	9236	746	12.38	179	148	10	8	23	8	56	19.4	16.0	0.87	2.49	0.87
Wardleworth East ...	6388	354	18.05	174	118	14	6	22	11	75	†27.2	18.5	0.94	3.44	1.72
„ West ...	7220	296	24.39	166	129	27	9	27	6	163	23.0	17.9	1.25	†3.74	0.83
„ South	8870	117	75.81	210	164	36	14	31	16	†176	23.7	18.5	1.58	3.49	†1.80
Wuerdle ...	7530	429	17.55	137	102	11	3	9	8	80	18.2	13.5	0.40	1.20	1.06
Return, Reg. Genl. ... (No information)	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...

† Lowest.

‡ Highest.

DEATHS.

1,434 deaths were registered during 1913 as belonging to Rochdale—males 702, females 732, and these numbers are made up as follows :—

Registered in the Borough ...	1,238
Deduct “ Non-Residents ” registered in the Borough ...	27
	1,211
*Add “ Residents ” registered outside the Borough ...	223
Nett Total ...	1,434

*Including 177 deaths of Rochdale residents in Dearnley Workhouse and 46 deaths in other towns, chiefly in Nursing Homes, Hospitals and Asylums.

The death-rate from All Causes is thus 15.4 per 1,000, which is slightly above the rate for 1912 (15.0 per 1,000), but below the average (16.6 per 1,000) for the preceding ten years 1903-1912.

The years 1912 and 1910 had the lowest death-rates of any year on record for Rochdale—each 15.0 per 1,000, and this is generally regarded as a very satisfactory figure for any manufacturing town.

In the following Table are given the deaths during each quarter of the year 1913 and two preceding years, along with their respective death-rates.

Quarter ending	No. of Deaths			Equivalent Annual Death-rate per 1,000 of Population		
	1913	1912	1911	1913	1912	1911
March 31st ...	400	429	409	17.4	18.6	18.0
June 30th ...	335	327	305	14.4	14.2	13.4
September 30th ...	328	296	349	13.9	12.7	15.1
December 31st ...	371	332	341	14.8	14.3	14.8

TABLE III.—Causes of, and Ages at Death during year 1913.
(Local Government Board Return.)

Acreeage 6,446.

CAUSES OF DEATH.	NETT DEATHS at the subjoined ages of "Residents," whether occurring in or beyond the District.												WARDS OF THE BOROUGH										Total Deaths whether of "Residents" or "Non-Residents" in Institutions in the District							
	All Ages		Under 1 year		1-2		2-5		5-15		15-25		25-45		45-65		65 years and over		Castleton North	Castleton South	Castleton East	Castleton West		Castleton Moor	Spotland East	Spotland West	Wardlith East	Wardlith West	Wardlith South	Werdlie
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.												
ALL CAUSES (Certified, Uncertified)	702	732	107	99	40	32	23	21	17	23	20	35	91	85	223	217	181	220	90	139	207	117	118	102	148	118	129	164	102	77
1—Enteric Fever	3	1	...	...	...	...	...	...	1	...	...	...	1	...	1	...	...	...	...	...	...	1	2	...	...	...	...	...	...	4
2—Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3—Measles	4	5	...	...	2	...	2	...	...	1	...	...	...	...	...	...	...	...	2	2	2	...	...	...	...	...	...	...	...	...
4—Scarlet Fever	1	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
5—Whooping Cough	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6—Diphtheria and Croup	3	6	1	1	1	...	...	4	1	...	...	...	...	...	...	...	...	...	2	2	1	...	...	...	...	...	...	...	...	...
7—Influenza	5	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8—Erysipelas	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9—Phthisis (Pulmonary Tuberculosis)	46	57	1	...	...	...	...	...	1	4	6	15	17	22	19	12	2	4	4	9	16	9	10	6	8	11	6	16	8	1
10—Tuberculous Meningitis	6	8	1	...	2	1	1	4	2	3	...	...	...	...	...	...	...	...	...	2	2	...	6	1	1	...	4	5	...	...
11—Other Tuberculous Diseases	14	17	2	2	6	1	2	1	1	2	1	1	3	1	3	2	1	1	...	4	5	...	6	2	4	1	4	1	4	3
12—Cancer, malignant disease	40	79	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	16	17	10	14	6	21	7	6	11	7	5	...
13—Rheumatic Fever	1	5	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	1	2	...	...	...	...	...	...	...	...	...	...
14—Meningitis	8	4	2	...	...	...	...	...	1	2	1	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...
15—Organic Heart Disease	52	80	...	...	...	...	...	...	1	...	2	2	10	15	18	40	21	...	15	9	17	12	9	10	20	9	7	10	14	2
16—Bronchitis	73	74	3	8	3	2	1	1	...	...	...	...	...	...	...	...	...	...	8	19	18	14	4	12	13	16	18	19	6	1
17—Pneumonia (all other forms)	55	27	8	6	17	3	5	...	1	1	1	2	6	3	12	8	5	4	10	15	8	7	2	8	5	9	11	2	4	...
18—Other Diseases of Respiratory organs	9	4	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	3	2	2	2	1	1	1	1	...
19—Diarrhoea and Enteritis	31	32	20	15	5	6	3	...	2	...	...	...	...	...	...	...	...	...	5	5	13	2	2	1	5	4	9	13	4	...
20—Appendicitis and Typhitis	3	4	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	1	2	2	2	2	1	...	1	1	...	...	...
21—Cirrhosis of Liver	5	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	2	1	...	...	...	...	...	...	...
22—Alcoholism	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23—Nephritis and Brights Disease	28	15	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24—Puerperal Fever	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25—Other Accidents and Diseases of Pregnancy and Parturition	...	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26—Congenital Debility and Malformation incl'g Premature Birth	45	47	44	47	1	...	...	...	...	...	...	...	...	...	...	...	...	...	4	9	16	6	12	4	4	5	13	11	8	...
27—Violent Deaths, excluding suicides	23	12	...	1	...	...	4	3	1	1	3	1	8	1	...	2	2	3	4	4	6	1	2	2	2	3	4	2	5	...
28—Suicides	8	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	1	...	...	...	...	...	...	...	...
29—OTHER DEFINED DISEASES:—	20	23	2	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
General Diseases	86	62	12	7	2	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of Nervous System and of Organs of Special Sense	28	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of the Circulatory System	15	26	1	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of the Digestive System	5	7
Non-Veneral Disease of Genito-Urinary System and Annexa	3	2					

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Ward Death-rates.

According to Table II., Castleton North Ward is again, as in year 1912, credited with the highest death-rate from All Causes—19.1 per 1,000, as compared with 15.4 per 1,000 for the whole Borough. This ward has also the highest death-rate during the past year from the zymotic group of diseases, 1.69 per 1,000 (as against 0.82 per 1,000 for the whole Borough), which along with the respiratory diseases may be said to be the chief cause of the high death-rate in this ward. Five other wards each had a death-rate higher than that for the Borough. The lowest rate was 11.8 per 1,000 in Castleton West Ward.

Classification of Causes of Death.

The deaths distributed in Table III. according to cause, age, and sex, have been classified according to the International list of causes of death which is now in use by the various Health Authorities throughout England and Wales.

Chief Causes of Death.

The chief causes of the deaths registered in Rochdale during the past year 1913 and the preceding year 1912 may be classed to a dozen headings given in the Table below. 1,024 or 71.4 per cent., of the total deaths during 1913 are thus recorded here, and these are stated separately in proportion to the total deaths from all causes, along with the respective death-rates.

Chief Cause of Death	No. of Deaths		Proportion per 100 deaths from All Causes		Death-rate per 1,000 of Population	
	1913	1912	1913	1912	1913	1912
Diarrhoea & Enteritis	63	26	4.4	1.9	0.67	0.28
Cerebral Hæmorrhage, and Apoplexy ...	75	87	5.2	6.3	0.75	0.94
Phthisis or Pulmonary Tuberculosis ...	103	102	7.2	7.4	1.10	1.10
Other Tubercular Diseases	45	39	3.1	2.8	0.48	0.34
Cancer	119	77	8.3	5.6	1.27	0.83
Organic Heart Disease	132	127	9.2	9.2	1.41	1.37
Bronchitis	147	136	10.3	9.8	1.57	1.47
Pneumonia (all forms)	82	93	5.7	6.7	0.88	1.01
Nephritis and Brights Disease	43	59	3.0	4.3	0.46	0.64
Premature Birth	49	41	3.4	3.0	0.52	0.44
Atrophy, Debility, and Marasmus... ..	32	35	2.2	2.5	0.34	0.38
Old Age	134	108	9.3	7.8	1.43	1.17

Cancer.

This disease is one of the chief causes of death, and in Rochdale during the past year 119 deaths were registered as due to this cause. The following figures give a comparison with previous years :—

Year	Males	Females	Total	Percentage of total deaths
1913	40	79	119	8.3
1912	35	42	77	5.6
1911	51	60	111	7.9

The death-rate for 1913 is thus 1.27 per 1,000 of population as against 0.83 per 1,000 in 1912 and 1.21 per 1,000 in 1911. Taking the figures of the past three years, out of every 14 deaths registered in the Borough, 1 was due to this cause, and for the whole of England and Wales the proportion is about the same as Rochdale. The age distribution and parts of body affected is given in the following table.

AGE DISTRIBUTION.

	25—45 Years	45—65 Years	Over 65 Years	Total
Males ...	2	21	17	40
Females ...	3	49	27	79

PARTS AFFECTED.

Buccal Cavity ...	...	...	...	...	...	...	...	2
Stomach, Liver, etc. ...	...	...	...	...	...	...	...	38
Peritoneum, intestines and rectum ...	...	...	...	...	...	...	...	26
Female genital organs ...	...	...	...	...	...	...	...	22
Breast (female) ...	...	...	...	...	...	...	...	9
Skin ...	...	...	...	...	...	...	...	3
Other Organs ...	...	...	...	...	...	...	...	19

In reviewing the incidence and death-rate from this disease during the past decade there appears to be a tendency to rise not only in this district but in many other districts. But, whether this is more apparent than real, due to improved methods of diagnosis or differences in classification, is not at present evident. Still one thing is clearly evident, that while the general death-rate, which includes the group of tubercular diseases, tends to fall, there appears to be according to statistics, no abatement but even a marked tendency to increase of the death-rate from cancer.

In Rochdale during the past year Cancer has claimed 119 victims, while Phthisis claimed 103, and with 45 deaths from other forms of tubercular diseases makes a total of 148 from all forms of tubercular disease. Yet, while a great national scheme which has for its purpose to make provision for the cure and prevention of Phthisis, combined with the greater object of the complete extirpation of the disease, is at present in preparation, and partly now in operation, Medical Science has as yet failed to discover any means of permanent cure or prevention of Cancer. This is the more regrettable inasmuch as for many years in a network of world-wide but co-ordinated laboratories, in which many of our ablest scholars in scientific research have been at work, yet the etiology of Cancer remains somewhat mysterious, still a vast amount of information has been gained and our knowledge greatly increased; and everyone hopes that it may be possible by the accumulation of experimental data combined with clinical experience and statistical evidence to work gradually towards the true scientific interpretation of what has been and is still one of the most mysterious problems in Medical Science.

For the present sufferers, however, such hopes avail but little, and the sad fact remains that there is yet no permanent cure for Cancer, except in so far as by early diagnosis and immediate operation, there is always the hope that the whole tumour has been removed before it spreads to other parts of the body.

But in cases too far advanced for operation the effects of radium treatment is often very remarkable. The tumour may often apparently disappear entirely and the patient appear cured under the radium treatment, but unfortunately in many such cases the tumour re-appears in some other part of the body at a later date, although it might be an interval of years; there is always this risk in advanced cases. But probably the most marvellous and beneficent effect of radium is its power to alleviate the peculiar kind of pain from which patients so frequently suffer, and in this respect it is a great boon and blessing to many in mitigating the pain of their later days.

Meantime the question should be considered if radium treatment could be made more readily available for patients in this district ; and further, the advisability of distributing at intervals small pamphlets setting forth the earlier signs and symptoms of cancer ; for, just as in many cases of Phthisis, there is a too frequent tendency to delay in seeking medical advice. But this delay and the longer the delay in proportion minimises the hope of effective treatment.

Bronchitis, Pneumonia, etc.

The two chief respiratory diseases, Bronchitis and Pneumonia, claimed 229 deaths, or 16 per cent. of the total deaths from all causes during the past year. Excluding tubercular diseases of the lungs the total deaths from respiratory diseases were 242—males 137, females 105 ; which correspond to a death-rate of 2.59 per 1,000 of the population, as against 2.77 per 1,000 in the previous year 1912. Table V. gives 3.32 per 1,000 as the average for the neighbouring manufacturing towns. The number of deaths from these causes during the past two years is given below :—

						1913		1912
Bronchitis	...	...	...	...	...	147	...	136
Pneumonia	...	...	...	...	...	82	...	93
Other Diseases of the Respiratory Organs	...	...	...	...	...	13	...	26
Totals	...	...	...	...	...	242		255

Table III. gives the detailed ages and ward distribution and Table I. shows the death-rate from these respiratory diseases during 1913. Wardleworth West had the highest (3.74 per 1,000) and Castleton Moor the lowest rate (1.15 per 1,000).

Mortality at different Ages.

The deaths registered as due to all causes during the past year are arranged below according to the age period, in comparison with the two preceding years.

Age Period	No. of Deaths			Percentage of Total Deaths		
	1913	1912	1911	1913	1912	1911
Under 1 year	206	209	268	14.4	15.1	19.1
1—2 years	72	58	64	5.0	4.2	4.6
2—5 „	44	57	53	3.1	4.1	3.8
5—15 „	40	47	55	2.8	3.4	3.9
15—25 „	55	63	58	3.8	4.6	4.1
25—45 „	176	190	182	12.3	13.7	13.0
45—65 „	440	367	367	30.7	26.5	26.1
65 years and over	401	393	357	28.0	28.4	25.4

Mortality in previous years.

The following Table IV. shows the birth-rate, infantile death-rate, and the death-rate from all causes in Rochdale during each of the past eleven years ; also the number of transferable deaths in each year. The figures in column 9 of this Table—Deaths of residents not registered in the district—refer to deaths in Dearnley Workhouse (177) and in other Towns (46), who were previously resident in the Borough.

TABLE IV.

Vital Statistics of Whole District during 1913 and previous years.

Local Government Board Return.

YEAR	Population estimated to Middle of each Year	BIRTHS			TOTAL DEATHS REGISTERED IN THE DISTRICT		TRANSFERABLE DEATHS ‡		NETT DEATHS BELONGING TO THE DISTRICT			
		Un-corrected Number	Nett		Number	•Rate	Of Non-residents registered in the District	Of Residents not registered in the District	Under 1 year of age		At all Ages	
			Number	•Rate					Number	Rate per 1,000 Nett Births	Number	•Rate
1	2	3	4	5	6	7	8	9	10	11	12	13
1903	84,918	...	2,071	24.4	1,328	15.6	10	137	283	137	1,455	17.1
1904	85,732	...	1,950	22.7	1,381	16.1	12	148	295	151	1,517	17.7
1905	86,554	...	1,880	21.7	1,305	15.1	13	151	250	133	1,443	16.7
1906	87,385	...	2,058	23.6	1,379.	15.8	15	167	284	139	1,531	17.5
1907	88,223	...	2,097	23.8	1,340	15.2	11	164	253	121	1,493	16.9
1908	89,068	...	2,202	24.7	1,482	16.6	13	163	371	168	1,632	18.3
1909	89,922	...	2,063	22.9	1,301	14.5	17	158	210	102	1,442	16.0
1910	90,785	...	1,981	21.8	1,219	13.4	21	163	204	103	1,361	15.0
1911	91,645	1,898	1,920	20.9	1,240	13.5	19	183	268	140	1,404	15.3
1912	92,530	1,860	1,879	20.3	1,190	12.9	22	216	209	111	1,384	15.0
Averages for years 1903-1912	88,676	...	2,010	22.7	1,317	14.9	15	165	263	131	1,466	16.6
1913	93,420	1,917	1,938	20.7	1,238	13.3	27	223	206	106	1,434	15.4

* Rates per 1,000 of Est. Population.

‡“ Transferable deaths ” are deaths of persons who, having a fixed or usual residence in England or Wales, die in a district other than that in which they resided. The deaths of persons without fixed or usual residence, *e.g.*, casuals, are not included in Columns 8 or 9, except in certain instances under 3 (b) below.

The following special cases arise as to Transferable Deaths :—

(1) Persons dying in Institutions for the sick or infirm, such as hospitals, lunatic asylums, workhouses, and nursing homes (but not almshouses) are regarded as residents of the district in which they had a fixed or usual residence at the time of admission. If the person dying in an Institution had no fixed residence at the time of admission, the death is not transferable. If the patient has been directly transferred from one such institution to another, the death is transferable to the district of residence at the time of admission to the first Institution.

(2) The deaths of infants born and dying within a year of birth in an Institution to which the mother was admitted for her confinement is referred to the district of fixed or usual residence of the parent

(3) Deaths from Violence are referred (a) to the district of residence, under the general rule ; (b) if this district is unknown, or the deceased had no fixed abode, to the district where the accident occurred, if known ; (c) failing this, to the district where death occurred, if known ; and (d) failing this, to the district where the body was found.

Census 1911 :—Total population at all ages, 91,428. Number of inhabited houses, 22,845. Average number of persons per house, 4.0. Area of District in acres (land and inland water) 6,446.

Comparison with other Towns.

We are indebted to the Medical Officers of Health of the various districts for the information contained in the following Table, which affords an interesting comparison of the birth-rate and chief mortality rates in Rochdale and the neighbouring manufacturing towns. In making these comparisons one has always to bear in mind the fact that the mortality from all causes and from different diseases varies to some degree with age and sex distribution in the different areas compared, and it therefore follows that crude death-rates computed without allowance for those variations in the different towns do not form so reliable a basis of comparison as rates which have been corrected or standardized for age and sex constitution of the population.

The death-rates from all causes in the following Table have accordingly been corrected in respect of age and sex.

TABLE V.—Mortality Rates in Neighbouring Towns during 1913.

Town	Estimated Population	Birth-rate per 1,000 of Est. Pop.	Death-Rate All Causes Standardised	Rates per 1,000 of Estimated Population.				
				Death-rate All Causes (crude)	Seven Zymotic Dis. (incl. Diarr. and Enteritis under 2 yrs.)	Pulmonary Tuberculosis	Other forms of Tuberculosis	Respiratory Diseases
Blackburn	133,931	21·7	17·1	15·8	1·10	0·65	0·34	3·07
Bolton	183,879	21·7	17·0	15·7	1·93	0·83	0·31	3·79
Burnley	109,021	22·8	18·6	16·8	†	0·96	0·33	3·31
Halifax	101,800	18·3	15·7	15·3	0·74	1·00	0·49	2·60
Huddersfield	110,882	19·5	15·5	14·8	0·82	0·89	0·36	2·81
Oldham	149,936	23·2	18·2	16·9	1·40	1·20	†	3·50
Stockport	112,480	23·2	16·6	15·7	1·81	1·41	0·55	2·98
St. Helens	99,460	32·2	20·4	19·0	3·72	1·00	0·90	3·86
Warrington	74,065	29·7	18·7	17·2	2·03	1·56	0·43	2·60
Wigan	91,573	27·8	20·5	18·4	3·04	0·88	0·64	4·66
AVERAGE 10 TOWNS	.....	24·0	17·8	16·6	*1·84	1·04	*0·48	3·32
ROCHDALE	93,420	20·7	16·4	15·4	0·82	1·10	0·48	2·59

† No figures available.

* Average 9 Towns only.

Meteorology.

In Table VI. the meteorological readings recorded at Broadfield Park Observatory during the past year are stated as monthly averages in comparison with the annual average for 1913, and for the preceding five years.

The outstanding feature of the weather during the past year was the dry summer and autumn. Out of the 153 days in the five months, June to October inclusive, there were only 70 on which rain was measured, a total rainfall of 10·35 inches, as compared with 102 days and a total rainfall of 24·42 inches in the corresponding period of 1912. The rainfall for the whole year was 39·42 inches as against 51·85 inches in 1912, which, with the exception of years 1903 (53·65 inches), and 1900 (52·84 inches), was the wettest year for 30 years.

The mean temperature and humidity showed little departure from the average. The temperature and rainfall are shown graphically on the accompanying chart in correlation with the weekly mortality, and are dealt with in detail.

TABLE VI.—Meteorology, 1913.

MONTH	Mean Barometric Pressure (reduced).	Tem-perature.		Mean Humidity (Sat. 100)	Rain		Wind.	
		Mean	Daily Range		No. of days it fell.	Amount	Prevailing Directions	Velocity—Miles per hour
January	‡29.797	‡38.2	8.5	†93.0	24	S. AND R. 4.570	S.W., N.E.	6.0
February	*29.974	39.3	10.3	90.8	17	S. AND R. 1.620	S.W., N.E.	6.5
March	29.833	40.8	11.9	85.6	25	S. AND R. 5.420	S.W., N.E.	†9.9
April	29.877	45.4	12.3	80.2	19	S. AND R. 4.935	N.E., S.W.	8.3
May	29.903	53.2	†14.6	80.5	22	3.805	N.E., S.W.	6.7
June	30.079	56.0	12.9	†76.0	15	2.770	S.W., S.E.	6.6
July	†30.105	57.3	13.7	78.4	12	†1.130	N.E., S.W.	3.8
August	30.092	†57.9	13.4	78.8	†11	2.500	S.W., N.E.	†3.0
September	30.046	56.4	11.3	82.8	14	1.640	N.E., S.W.	5.0
October	29.891	50.4	10.8	90.5	18	2.315	N.E., S.E.	4.7
November	29.870	45.2	9.7	92.0	†29	†5.530	S.W., N.E.	7.0
December	30.078	39.2	†5.6	90.5	21	S. AND R. 3.185	S.W., N.E.	7.0
Yearly Average ...	29.962	48.3	11.3	84.9	Total 227	Total S. AND R. 39.420	S.W., N.E.	6.2
Average for 5 years 1908-1912	29.912	49.4	12.4	86.2	219	46.688	S.W., N.E.	5.5

* Average for 5 years 1908-1912.

† Lowest.

† Highest.

S. AND R. indicates Snow and Rain.

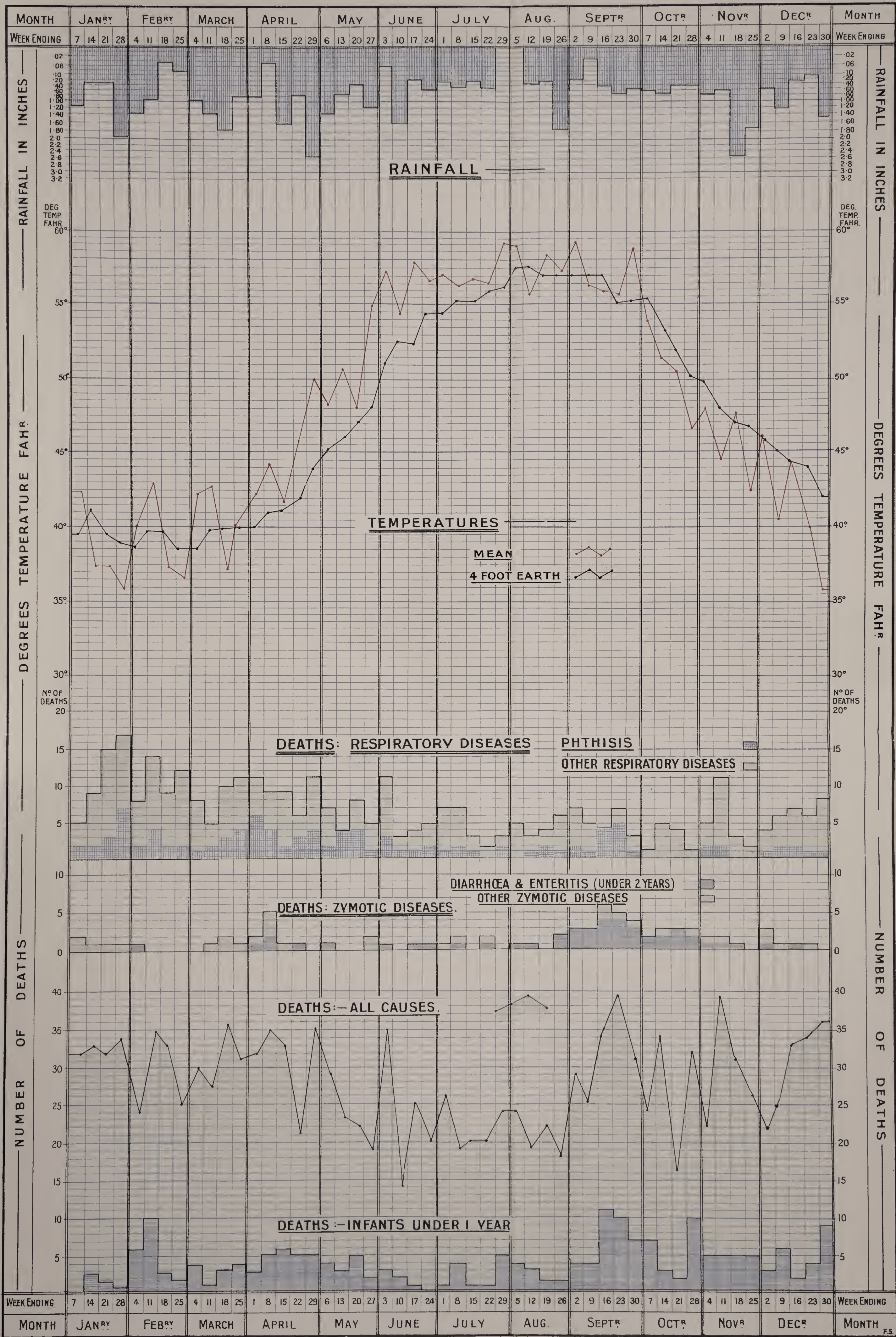
Notes on Chart A.

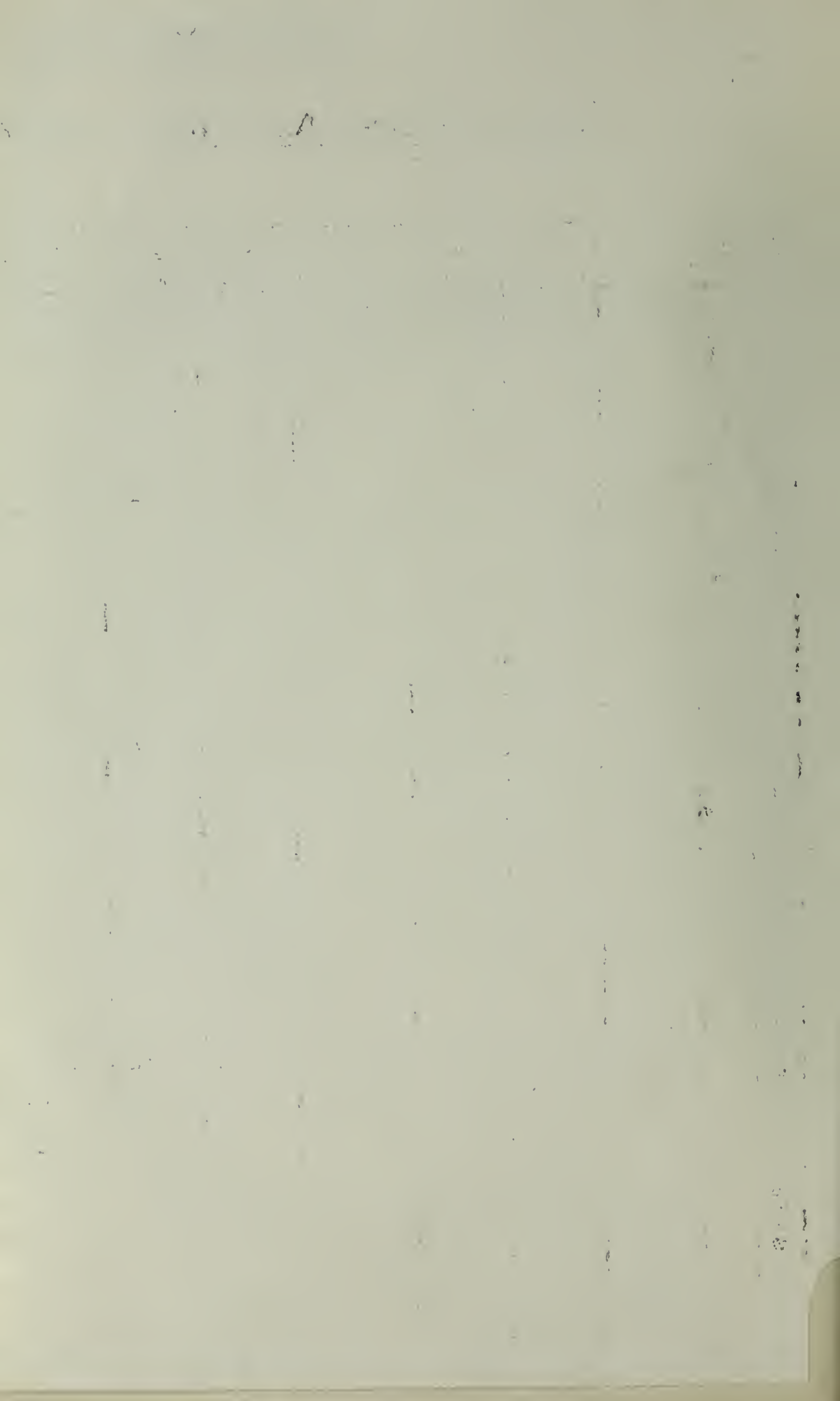
Comparing this Chart with the corresponding Chart of 1912 it will be observed that the death-rate from all causes was highest during the third week in September and the second week in November—each with 39 deaths, whereas in the preceding year 1912 the highest death-rate was during the first week of March (49 deaths); while the lowest death-rate in 1913 was during the second week of June (14 deaths) as compared with 15 deaths—the lowest mortality in 1912, during each of the last two weeks in June. During the months of June, July, and August of 1913, the weekly mortality was generally lower than for the corresponding period of 1912.

The mortality from zymotic diseases as a whole was lower during 1913 than during 1912, but, while the mortality from such zymotics as Measles and Whooping Cough was lower than in 1912, the mortality from Diarrhœa and Enteritis was much higher, claiming no less than 46 deaths of children under two years of age, and 28 of these occurred during the ten weeks ending October 7th. Corresponding with this period, the 4-foot earth thermometer recorded an average weekly temperature of 57 degrees F., and remained about that point for five weeks, and during the last three weeks of this period the rainfall was low.

COUNTY BOROUGH OF ROCHDALE.

GRAPHIC CHART A. WEEKLY NUMBER OF DEATHS & METEOROLOGY 1913.





In the preceding year 1912, the 4-foot earth temperature averaged 58.5 degrees F. during the third week of July, and remained about that figure for the next two weeks, but during this period the weekly rainfall was above the average and measured over 3 inches during the first week of August.

The mean weekly temperature in 1912 reached the maximum during the second week in July with 63 degrees F., and remained about this figure for two weeks, followed by a sharp descent to 54 degrees F. during the first week of August. But during the past year the maximum mean temperature was not reached until the last week in July (two weeks later) with 59 degrees F. and remained above 55 degrees F. until end of September.

The lowest mean temperature in 1913 was 36 degrees F. during last week of January, compared with 26.9 degrees F. during the first week of February in 1912.

The tracings of weekly deaths from Respiratory Diseases compared with 1912 show no appreciable difference except during the month of February, when the mortality from these diseases was greater in 1912 than the past year.

INFANTILE MORTALITY.

The deaths of infants under one year of age during 1913 numbered 206—107 males and 99 females ; as against 209—107 males and 102 females in the preceding year 1912. Of the deaths during 1913, 186 were legitimate births, while 20 were illegitimate ; and of the whole, 83 or 40 per cent. were insured.

In Table VII. the deaths have been arranged and classified according to age and cause, and method of feeding, while the number of deaths at each age and from each cause during 1913 are compared with 1912 and with the averages for the preceding five years.

The chief causes of death along with the method of feeding in each case are tabulated below.

Cause of Death	No. of Deaths	Method of Feeding			No Food	Percentage of Total Deaths under one year of age	Proportion per 1,000 Births registered
		Breast	Breast and Bottle	Bottle			
Premature Birth	49	9	2	8	30	23.8	25.3
Marasmus, &c.	32	9	1	14	8	15.5	16.5
Diarrhœa (Incl. Epd. Enteritis)...	20	1	4	15	...	9.7	10.3
Enteritis	15	...	3	12	...	7.3	7.7
Convulsions	17	3	2	10	2	8.3	8.8
Broncho-Pneumonia	14	5	3	6	...	6.8	7.2
Bronchitis	11	2	...	9	...	5.3	5.7

These seven causes were responsible for 158 or 77 per cent. of the total infant deaths during the year.

The method of feeding adopted for the infants who died during 1913 is given below in comparison with the corresponding figures for 1911 and 1912.

Year	Total Deaths	Method of Feeding				*No Food	
		Breast		†Bottle		No.	Per cent.
		No.	Per cent.	No.	Per cent.		
1913	206	37	18·0	116	56·3	53	25·7
1912	209	41	19·6	120	57·4	48	23·0
1911	268	53	19·8	165	61·6	50	18·6

*Death occurred chiefly during first week of life before any system of feeding could be well established.

†Included those fed both breast and bottle.

The Infant death-rate calculated per 1,000 births registered (1,938) is 106, or 5 per 1,000 less than the rate in 1912 (111 per 1,000 births), and 25 per 1,000 below the average rate for the preceding ten years 1903-1912. The lowest rates on record for Rochdale are 102 and 103 per 1,000 births in 1909 and 1910 respectively.

Comparing the infant death-rates for each quarter of the past and two previous years in the following summary, the death-rate during the first two quarters of 1913 is shown very low, and in the last two quarters much higher, due chiefly to Diarrhœa and Enteritis, which during that period caused 28 deaths of children under one year and for the whole year 35 deaths.

Quarter ending	No. of Births Registered			No. of Deaths of Infants under 1 year			Infant Death-rate per 1,000 Births		
	1913	1912	1911	1913	1912	1911	1913	1912	1911
March 31st ...	489	508	487	42	66	58	86	130	119
June 30th ...	490	479	491	41	55	46	84	115	94
September 30th ...	481	455	472	57	44	104	118	97	220
December 31st ...	477	436	469	66	44	60	140	101	128

Table II. gives the number of infant deaths and the corresponding death-rate in each ward of the Borough for 1913, and these figures have been extracted and given below in comparison with 1912. Wardleworth South Ward has the highest rate with 176 per 1,000 births, Wardleworth West next with 163, and three other wards have a death-rate higher than the rate for the whole Borough. The lowest rate is 51 per 1,000 births in Castleton West.

Ward	Infant death rate per 1,000 Births registered		
	1913	1912	Average 1908-1912
CASTLETON EAST ...	144	111	138
CASTLETON SOUTH ...	75	105	126
CASTLETON NORTH ...	108	141	121
CASTLETON WEST ...	†51	†60	107
CASTLETON MOOR ...	126	89	†92
SPOTLAND EAST ...	87	116	114
SPOTLAND WEST ...	56	75	107
WARDLEWORTH EAST ...	75	†175	139
WARDLEWORTH WEST ...	163	117	134
WARDLEWORTH SOUTH ...	†176	154	†172
WUERDLE ...	80	103	113
THE BOROUGH ...	103	111	125

† Highest.

† Lowest.

Comparative Rates.

The following Table has been chiefly compiled from figures kindly supplied by the various Medical Officers of Health to show the infant death-rates in the ten large neighbouring manufacturing towns in comparison with Rochdale.

The rate of 106 per 1,000 births for this Borough during the past year is seen to be 36 per 1,000 below the average for the neighbouring towns, and for the preceding years 1908-1912 the infant death-rate in Rochdale compares favourably.

* Average 2 years 1911-1912.

† Figures not available.

TABLE VIII.

Town	Infantile Death-rate per 1,000 Births Registered		
	1913	1912	Average for 5 years 1908-1912
Blackburn	147	119	143
Bolton	142	96	129
Burnley	174	145	176
Halifax	103	81	98
Huddersfield	103	97	107
Oldham	138	117	136
Stockport	146	109	144
St. Helens	155	124	134
Warrington	131	92	123
Wigan	179	125	154
AVERAGE 10 TOWNS	142	111	134
ROCHDALE	106	111	125
England and Wales	109	95	112

In some previous reports we have discussed the subject of infantile mortality in some detail, and here it can only be briefly touched on. But to all interested in this subject there is one aspect which is now receiving the serious consideration which it demands. If one reviews the Annual Reports of this Borough for the past four quinquennial (20 years), one cannot fail but to observe that the decrease in infantile mortality is almost entirely due to a continuous and increasing reduction in the mortality from one group of infantile diseases, while the mortality from another group of diseases remains fairly constant. The former group may be considered to include the chief diseases of post uterine life or the diseases from which children suffer after birth, such as all digestive troubles and diseases of the lungs ; whereas the latter may be considered to include generally the diseases or rather disabilities from which the infant suffers, due chiefly to the ante-natal conditions of the mother or parents or to hereditary conditions, and classified under such terms as Premature Birth, Marasmus and Debility. Hence, since the causes which have operated in bringing about a reduction of infantile mortality from the one group of diseases have failed to operate equally or appreciably in the other, and since the chief causes and influences in operation in the past have been improving sanitation, combined with the work of Health Visitors and better medical care, it appears evident that before any further appreciable reduction in infantile mortality can be obtained, it will be necessary to seriously consider all matters pertaining to the ante-natal Hygiene and welfare of the Mother, and as a logical sequence the more appropriate and specific education of the girl. In previous reports I have argued that the more specific education of the girl should be on a different plane and have a different objective to that of boys, if she is to be fitted to discharge what must always be considered her primary duties in life—the management of the home and to bear the burden of maternity.

In this respect one cannot now fail to observe the trend of legislation, and it is very evident that if the care of the child is to be the concern of the State, then so also, and with greater reason should the care of maternity: for what the mother is the children are. Yet no one can deny or even doubt but that in the past the woman who toiled all day and endeavoured to do her best for her home and family has not received from man in his wisdom or selfishness the sympathetic consideration which the importance of her work and duties demanded. For, after all, such women are the salt of the earth, and have played no unimportant part in the building up of the great industries of Lancashire.

Hence in order to render more efficient and effective the work in this department of Public Health the following scheme in outline is foreshadowed and being discussed in many quarters :—

- (1) To make notifications of births compulsory, including still-births, dead-births and miscarriages.
- (2) To establish clinics for babies and children under school age.
- (3) To establish maternity care centres where advice and treatment can be obtained.
- (4) To place the maternity and pregnancy sickness benefits under the control of Public Health Authorities.

The adoption or modification of such a scheme will require the serious consideration of Health Authorities, who I think must recognise that, in this, probably the most important field of public health work, some co-ordination and extension of the measures already adopted and in operation is necessary for effective work and efficient public health administration.



SECTION II.

Infectious Disease.

The diseases dealt with in this Section of the Report are the Seven Chief Zymotics—Small-pox, Scarlet Fever, Diphtheria, "Fever" (which includes Enteric Fever, Typhus and simple Continued Fever), Measles, Whooping Cough, and Diarrhœa and Enteritis (under 2 years); also Chicken-pox, Erysipelas, Puerperal Fever, Cerebro-Spinal Meningitis and Acute Poliomyelitis, Phthisis, and other Tubercular diseases are also considered; while statistics relating to deaths from Influenza, Pneumonia and Bronchitis are set out in Tables III. and IV. The Tables have been compiled from daily notifications and returns of cases of infectious disease, and arranged to show the age, seasonal and ward incidence. A statement of the morbidity and mortality of infectious diseases during each year from 1893-1913 inclusive is contained in Table I.

(a) NOTIFIABLE INFECTIOUS DISEASES.

The incidence of these diseases during the past year was above the average, a total of 718 cases with 24 deaths being reported, as compared with 576 cases with 29 deaths during 1912, and an average for the preceding ten years of 486 cases and 38 deaths. Scarlet Fever was the chief cause of this increase in cases.

Small-pox.

Although in the neighbouring towns of Oldham and Royton 17 cases of this disease were reported during the year, Rochdale has again fortunately been free from this disease. Several cases of a suspicious nature were, however, seen by request, and it was considered advisable or necessary to place some of these cases under close observation and take all proper precautions.

In England and Wales, excluding ports, 90 cases of Small-pox were notified, as compared with 111 in 1912 and 265 in 1911. The following Table as to vaccination of infants in the Rochdale Registration District, which includes in addition to the Borough of Rochdale, the neighbouring districts of Whitworth, Wardle, Littleborough, Milnrow and Norden, has been compiled from figures kindly supplied by R. A. Leach, Esq., Clerk to Rochdale Union, and relates to the period of eleven years (1902-1912) ending December, 1912. All children that may have been vaccinated after this return was made up appear in this Table as unvaccinated.

On an examination of this Table one cannot but note that the number of births registered has been declining since 1908, and is for the year 1912 at the lowest figure on record. Of the surviving infants for vaccination only 32.4 per cent. were successfully vaccinated, while the number not vaccinated by reason of statutory declaration amounted to 62.9 per cent., or about 2 per cent. more than the previous year. This is the highest percentage of declarations yet recorded in the Rochdale district for any one year.

TABLE I.—Morbidity and Mortality of Infectious Diseases during each year from 1893 to 1913 inclusive.

DISEASE	YEARS																				ANNUAL AVERAGES	
																					10 YEARS 1893-1902	10 YEARS 1903-1912
	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912		
Compulsorily Notifiable—																						
SMALL-POX	No. of Sicknesses	32	14	7	2	...	...	2	1	24	114	3	2	4	1	...	...	...	...	...	8 2	12.4
	No. of Deaths	5	1	...	...	...	...	...	...	...	5	1	...	...	...	...	...	...	...	...	0.6	0.6
	Per cent. of Deaths to Sickness	15.6	7.1	...	...	...	...	...	...	...	4.4	33.3	...	...	...	...	...	...	...	...	2.3	3.8
SCARLET FEVER	No. of Sicknesses	292	97	846	371	97	84	211	114	195	91	304	478	335	245	152	201	308	305	451	309.8	319.2
	No. of Deaths	11	29	45	24	7	3	9	2	7	2	11	14	13	4	7	10	8	10	9	13.9	10.8
	Per cent. of Deaths to Sickness	3.8	3.6	5.3	6.5	7.2	3.6	4.3	1.8	3.6	2.2	3.6	4.6	3.9	1.6	4.6	5.0	2.6	3.3	2.0	4.2	3.5
DIPHTHERIA	No. of Sicknesses	44	80	89	40	16	27	29	32	44	36	69	55	81	104	82	84	30	40	51	43.7	65.0
(incl. Mem. Croup)	No. of Deaths	17	48	27	9	7	4	13	7	16	9	21	18	20	22	19	13	9	3	10	15.7	16.1
TYPHOID FEVER	Per cent. of Deaths to Sickness	38.6	60.0	30.3	22.5	43.7	14.8	44.8	21.9	36.4	25.0	30.4	32.7	24.7	21.2	23.1	15.5	30.0	7.5	20.0	33.8	25.3
	No. of Sicknesses	70	68	42	55	29	77	35	30	51	37	31	22	34	16	23	18	17	6	13	49.4	20.3
(incl. Contd. Fever and	No. of Deaths	19	9	9	7	6	16	9	3	8	4	7	3	5	5	9	3	6	3	4	9.0	5.1
Para-Typhoid Fever)	Per cent. of Deaths to Sickness	27.1	13.2	21.4	12.7	20.7	20.8	25.7	10.0	15.7	10.8	22.6	31.8	21.7	31.3	39.0	16.7	35.3	50.0	30.8	17.8	28.8
TYPHUS FEVER	No. of Sicknesses .....	...	...	1	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	0.7	...
	No. of Deaths .....	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.1	...
	Per cent. of Deaths to Sickness .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
PUERPERAL FEVER.....	No. of Sicknesses	19	11	11	7	7	17	9	9	13	10	7	11	13	10	5	4	5	10	8	11.3	8.1
	No. of Deaths	12	6	5	4	4	7	3	3	6	3	3	2	5	6	1	1	4	5	4	5.3	3.6
	Per cent. of Deaths to Sickness	63.2	54.5	45.5	57.1	57.1	41.2	33.3	33.3	46.2	30.0	42.8	18.2	62.5	60.0	20.0	25.0	80.0	50.0	50.0	46.1	44.7
ERYSIPELAS	No. of Sicknesses	56	69	54	72	43	103	84	42	81	61	69	81	73	50	55	60	47	62	52	66.5	60.9
	No. of Deaths	3	1	5	4	...	2	2	2	5	...	3	1	6	...	1	2	...	1	2	2.4	1.8
	Per cent. of Deaths to Sickness	5.4	1.4	9.3	5.6	...	1.9	2.4	4.8	6.2	...	4.4	1.7	8.2	...	1.8	3.3	...	1.6	3.8	3.7	2.7
§ACUTE POLIOMYELITIS...	No. of Sicknesses .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	0.1
	No. of Deaths .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Per cent. of Deaths to Sickness .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
§CEREBRO-SPINAL FEVER	No. of Sicknesses .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	No. of Deaths .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Per cent. of Deaths to Sickness .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTALS	No. of Sicknesses	513	1039	1050	547	192	314	368	229	385	259	594	657	529	426	317	367	407	423	576	489.6	486.0
	No. of Deaths	67	94	92	48	24	32	36	17	42	18	50	58	49	37	37	29	27	22	29	47.0	38.1
	Per cent. of Deaths to Sickness	13.1	9.0	8.8	8.8	12.5	10.2	9.7	7.4	10.9	6.9	8.4	7.6	9.3	8.7	11.7	7.9	6.6	5.2	5.0	9.7	7.9
*Not Compulsorily Notifiable—																						
MEASLES.....	No. of Sicknesses .....	...	...	...	...	...	...	345	577	46	478	72	459	72	60	80	101	157	878	1246	†361.5	334.9
	No. of Deaths	76	4	35	43	68	13	24	34	5	71	4	42	1	24	66	17	4	31	29	37.3	26.8
WHOOPING COUGH	No. of Sicknesses .....	...	...	...	...	...	...	179	163	67	67	74	...	...	...	...	98	138	129	292	†119.0	90.5
	No. of Deaths	49	10	19	52	18	2	19	34	20	13	42	36	13	27	25	6	17	17	26	23.6	22.8
CHICKEN POX	No. of Sicknesses .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	No. of Deaths .....	...	...	2	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	405	0.3	0.2

* As these diseases are not compulsorily notifiable the numbers here recorded are probably incomplete.

§ Compulsorily Notifiable from September 1st, 1912.

† Average 4 years.

TABLE II.

Return relating to Vaccination of Infants during 11 years 1902-1912 for Rochdale
Registration District.

YEAR	No. of Births Registered	Died before Vaccination	No. Surviving	Successfully Vaccinated		Insusceptible to Vaccination		NOT VACCINATED Statutory Declaration of Conscientious Objection		REMAINDER OF SURVIVING CHILDREN					
				Number	Per-centage	Number	Per-centage	Number	Per-centage	Postponed by Medical Certificate		Removed to other Districts		Not otherwise accounted for	
1902	2838	277	2561	2051	80.1	3	0.1	323	12.6	36	1.4	122	4.8	26	1.0
1903	2869	303	2566	2006	78.2	1	...	428	16.7	38	1.5	86	3.3	7	0.3
1904	2738	267	2471	1959	79.3	4	0.2	399	16.1	29	1.2	77	3.1	3	0.1
1905	2634	265	2369	1811	76.4	2	0.1	436	18.4	47	2.0	68	2.9	5	0.2
1906	2787	286	2501	1846	73.8	2	0.1	561	22.4	34	1.4	52	2.1	6	0.2
1907	2778	252	2526	1674	66.3	2	0.1	708	28.0	40	1.6	88	3.5	14	0.6
1908	2957	290	2667	1252	46.9	6	0.2	1280	48.0	39	1.5	73	2.7	17	0.6
1909	2779	203	2576	987	38.3	6	0.2	1489	57.8	19	0.7	57	2.2	18	0.7
1910	2711	195	2516	905	36.0	...	...	1500	59.6	26	1.0	74	3.0	11	0.4
1911	2669	238	2431	841	34.6	4	0.2	1478	60.8	25	1.0	60	2.5	23	0.9
Av. for 10 years 1902-11	2776	258	2518	1533	61.0	3	1.2	860	34.0	33	1.0	76	3.0	13	0.5
1912	2581	182	2399	777	32.4	3	0.1	1510	62.9	20	0.8	69	2.9	20	0.8

According to the returns published by the Local Government Board, Rochdale is included with two or three other Registration Districts in Lancashire, in which is recorded the highest percentages of children not vaccinated by reason of conscientious objection. The following Table gives the percentages of births registered which are classed to this heading, and Rochdale compared with either Lancashire or the whole of England and Wales is seen to have double the number of unvaccinated.

TABLE IIa.

Not Vaccinated by reason of statutory declaration of conscientious objection.—
Percentages of Births registered.

Year	Rochdale Registration District	Lancashire	England and Wales
1907	25.5	8.0	8.4
1908	43.3	14.8	17.0
1909	53.6	18.5	21.6
1910	55.3	21.5	26.0
1911	55.4	22.9	28.4

To these figures a small percentage may be added in each case to cover the births not finally accounted for, such as those postponed by medical certificate and removals to other districts, for in many of these it is probable no vaccination would ever take place.

TABLE III.—Cases of Infectious Disease notified or discovered during year 1913, and distributed according to Wards of the Borough, also cases removed to Hospital from each Ward.

DISEASE	Total Cases	AGE OF PATIENTS							WARDS OF BOROUGH.										
		Under 1 year	1—5 years	5—15 years	15—25 years	25—45 years	45—65 years	65 years and over	Castleton North	Castleton South	Castleton East	Castleton West	Castleton Moor	Spotland East	Spotland West	Wardleworth East	Wardleworth South	Wardleworth West	Wardle
A.—Compulsorily Notifiable—																			
Small-pox { Cases Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever { Cases Deaths Removed	565 7 446	133 3 110	373 4 288	46 38 21	8 8 8	3 1 1	...	...	23 1 17	67 48 8	77 58 14	63 54 9	111 2 84	25 17 ...	35 26 4	42 32 1	64 1 57	37 2 34	...
Diphtheria { Cases Deaths Removed	59 8 33	21 5 9	21 1 14	4 3 1	8 6 5	1 ...	...	...	5 2 ...	...	...	...	5 1 1	...	...	...	...	...	...
* Typhoid Fever { Cases Deaths Removed	16 4 8	...	4 1 ...	1 ...	5 4	2 2	...	...	...	...	...	...	2 2 2	1 ...	...	1 1 1	1 ...	1...	...
Typhus Fever { Cases Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas { Cases Deaths	67 1	1 ...	2 ...	5 1	18 6	26 ...	...	...	...	10 ...	6 ...	4 ...	11 1	4 1	3 1	4 ...	7 ...	13 1	5 ...
Puerperal Fever { Cases Deaths	7 2	...	...	1 1	...	...	...	...	...	...	1 1	1 ...	2 1	1 ...	1...	...	...	...	...
Acute Poliomyelitis { Cases Deaths	2 1	1 1	1 ...	...	...	...	...	...	...	...	...	...	1 1	...	...	...	...	...	...
Cerebro-Spinal Fever { Cases Deaths	2 1	1 ...	...	...	1 1	...	...	...	...	...	...	...	...	...	...	1 1	...	...	...
B.—Not Compulsorily Notifiable—																			
Measles { Cases Deaths	324 9	...	1 ...	...	...	...	...	...	23 2	43 2	15 2	25 3	11 10	26 22	67 42	26 1	54 2	32 4	8 1
Whooping Cough { Cases Deaths	90 3	...	...	...	...	...	...	...	3 ...	1 ...	...	...	...	...	2 6	2 5	2 20	...	...
Chicken-pox { Cases Deaths	165 ...	...	...	...	...	...	...	...	1 ...	4 ...	16 ...	37 ...	40 ...	12 ...	6 ...	...	...	10 ...	14 ...
TOTALS..... { Cases Deaths Removed	1297 36 487	157 18 119	401 7 302	57 1 42	46 3 18	34 2 3	17 1 1	55 5 22	135 2 54	130 5 69	146 2 59	195 8 87	91 18	159 28	77 4 34	153 1 61	99 2 34	47 2 21	...
Tuberculous Disease (Comp. Notif.)—																			
Pulmonary Tuberculosis { Cases Deaths	195 103	1 ...	18 5	42 21	76 39	47 31	5 6	18 4	28 9	18 16	8 9	15 10	22 6	16 8	17 11	30 16	14 6	9 8	...
Other Forms Tuberculosis { Cases Deaths	164 45	8 5	55 8	36 2	23 4	12 5	7 2	1 ...	19 4	16 7	23 ...	10 7	15 3	23 4	19 2	22 6	18 8	12 4	...
TOTALS..... { Cases Deaths	359 148	9 6	73 13	78 23	99 43	59 36	12 8	19 4	47 13	34 23	17 9	25 17	37 9	37 12	36 13	52 22	32 14	21 12	...
Influenza { Deaths	13	...	...	...	2	6	5	...	2	2	1	...	...	2	3	1	2	...	...
Pneumonia { Deaths	82	25	2	3	9	20	9	5	10	15	8	7	...	8	5	11	9	...	...
Bronchitis { Deaths	147	7	1	1	6	53	68	8	19	18	14	4	...	13	16	19	18	...	...

In previous reports, and especially in the report of 1909, I have discussed the question of vaccination as a preventive against Small-pox, from different points of view. Hence on this occasion I will be very brief :—

- (1) It is now frequently put forward as an argument that the diminution in the incidence and case mortality of Small-pox in recent years is due to the extension and efficiency of modern sanitation.

This argument is not supported by facts ; Small-pox, somewhat like Measles, in its epidemiological history has probably shown less dependence on such conditions as race, environment and improved sanitation than any of the other infectious diseases. Hence in prevaccination days Small-pox claimed for its victims no less than the king in his palace, the beggar on the street, and to-day sanitation in the highest degree of efficiency can no more protect the former from Small-pox than the latter, although sanitation is equally good for both. Sanitation, every one gladly recognises, has greatly reduced the prevalence of such diseases as Typhus Fever, Typhoid Fever, Cholera, Diarrhœa in its many forms, and even Tuberculosis ; but even its most strenuous advocates, and those who are the most competent to measure the achievements of the work of sanitation do not claim that it bears any measurable relation to the epidemiological progress of Small-pox.

- (2) Vaccination and re-vaccination systematically carried out confer complete protection to any community ; although the individual protection may not be complete or absolute. Still, should any individual who has been successfully vaccinated once or twice, be so unfortunate as to contract Small-pox, the attack will be a mild one ; and the mildness will usually be in direct ratio to the efficiency, and in inverse ratio to the interval of time between the vaccination and the attack of Small-pox.

Still, if efficient and systematic vaccination is in the present state of our knowledge the only effective preventive, while at the same time the Law of England makes provision whereby at present over 60 per cent. of the children in Rochdale, or anywhere else, can escape vaccination, the reasonable question arises, why make any endeavour to prevent Small-pox ? At the time of writing, June, 1914, Small-pox is on our borders and within our gates. It causes a considerable flutter and some misgivings of what might happen, yet the indifference of the present generation will only be overcome when actually threatened with a virulent epidemic, which every Health Authority is in strange contrast endeavouring by every means to prevent.

Scarlet Fever.

This disease tends to recur in epidemic form in every community at intervals from 7 to 10 years ; and in the Annual Reports of 1909-10, an epidemic was predicted as imminent. Unfortunately such a prediction proved true during the past year. The two previous epidemic years were 1895 and 1905, with 846 cases in the former and 478 in the latter ; while during the past year 1913, 565 cases of Scarlet Fever have been notified within the Borough ; but the difference in the case mortality is significant, inasmuch as in 1913 the number of deaths per 100 cases was only 1.2, whereas in 1905 and 1895 there were 4.6 and 5.3 deaths respectively for every 100 cases.

Tables III. and IV. show the age, seasonal and ward incidence. Castleton South, East, West, and Castleton Moor and Wardleworth South were the wards chiefly affected. The monthly incidence was highest during November and December with 61 and 86 cases respectively. 380 of the cases notified occurred among children attending school, and the schools chiefly affected in this respect were :—St. Edward's (30 cases), Heybrook (29 cases), Derby-street (27 cases), Newbold (26 cases), and Castleton (25 cases). On account of the general prevalence of the disease the whole of the schools were closed for an extra two weeks at Rushbearing.

Of the 565 cases notified, 119 cases (or 21 per cent.) were treated in their own homes, while 446 cases (or 79 per cent.) were sent to Hospital.

TABLE IV.

Progress of Infectious Disease during the year 1913, being Cases notified or discovered in each Month.

DISEASE	1913												
	January	February	March	April	May	June	July	August	September	October	November	December	Total for the Year.
A.—Comp. Notifiable—													
Small Pox { Cases	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever ... { Cases	40	27	34	29	44	41	56	47	56	44	61	86	565
{ Deaths	1	...	1	1	1	...	...	...	1	...	2	...	7
Diphtheria { Cases	6	2	7	4	4	3	7	7	7	5	5	2	59
{ Deaths	1	...	...	1	1	...	1	...	2	1	...	1	8
†Typhoid Fever { Cases	1	1	2	1	4	3	...	1	1	2	...	...	16
{ Deaths	...	...	3	...	...	1	...	...	...	...	...	...	4
Typhus Fever ... { Cases	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas..... { Cases	5	...	3	2	9	3	7	4	7	4	9	14	67
{ Deaths	...	...	...	...	...	...	...	...	...	...	1	...	1
Puerperal Fever { Cases	1	1	...	...	...	1	2	...	...	1	...	1	7
{ Deaths	1	...	...	...	...	...	...	...	...	1	...	...	2
Acute Poliomylitis.. { Cases	...	...	1	...	...	...	...	...	...	1	...	...	[ 2
{ Deaths	...	...	1	...	...	...	...	...	...	...	...	...	1
Cerebro-Spinal { Cases	...	...	...	...	...	...	...	...	...	...	...	2	2
Fever..... { Deaths	...	...	...	...	...	...	...	...	...	...	...	1	1
B.—Not Comp. Notifiable—													
Measles { Cases	11	4	10	9	3	42	67	23	19	27	60	49	324
{ Deaths	3	...	1	2	...	...	1	...	1	1	...	...	9
Whooping Cough { Cases	...	1	...	7	4	...	3	6	1	7	19	42	90
{ Deaths	...	...	...	...	...	...	...	...	...	...	1	2	3
Chicken Pox ... { Cases	26	4	...	3	3	24	57	18	3	8	9	10	165
{ Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...
Total { Cases	90	40	57	55	71	117	199	106	94	99	163	206	1297
{ Deaths	6	...	6	4	2	1	2	...	4	3	4	4	36
Tuberculous Diseases (Comp. Notifiable)—													
†Pulmonary Tuberculosis { Cases	15	23	21	14	15	20	13	10	20	13	11	20	195
{ Deaths	14	10	14	14	13	6	5	6	10	1	4	6	103
*Other Forms Tuberculosis { Cases	...	47	30	9	11	14	8	4	7	10	7	17	164
{ Deaths	2	3	2	4	3	5	2	3	5	5	5	6	45
Total { Cases	15	70	51	23	26	34	21	14	27	23	18	37	359
{ Deaths	16	13	16	18	16	11	7	9	15	6	9	12	148
Influenza .....Deaths	3	1	1	4	...	1	...	...	...	...	3	...	13
Pneumonia .....Deaths	10	9	6	10	4	6	5	5	3	6	10	8	82
Bronchitis .....Deaths	24	24	16	13	8	11	7	10	8	4	11	11	147

† Including Para-Typhoid Fever.

‡ Compulsorily Notifiable, January, 1912.

* Compulsorily notifiable, February, 1913.

OUTSTANDING FEATURES.

The outstanding feature of this epidemic has been its insidious and protracted nature ; although no milk supply nor school has been specially involved nor any focus of special infection discovered. The explanation, however, is largely due to the fact that so many cases, although in the earlier and most infectious stage of the disease, yet exhibiting signs and symptoms so mild and indefinite that frequently parents did not treat the matter seriously ; and when a medical man was not called in such cases were often not detected until some of the more serious complications of Scarlet Fever supervened, while at the same time such cases being in the earlier and most infectious stage were the means of maintaining the spread of the disease to others in factories, workshops and schools.

The mildness of the disease is shown by the fact that several children—five during the month of July alone—were found by the Teachers and Nurses in actual attendance at school suffering from Scarlet Fever.

In one case reported during December of the year under review, it was necessary to institute legal proceedings for “ wilful exposure whilst suffering from Scarlet Fever without proper precautions against spreading such disease.” The Magistrates were satisfied an offence had been committed, and imposed a fine of 5/- and costs. But the Health Committee in this case decided to prosecute not so much for obtaining a penalty as to get the public to realise the seriousness of Scarlet Fever and understand that cases of such infectious disease must be properly isolated and precautions taken to prevent the spread of the disease to others.

DETENTION IN HOSPITAL.

The average period of detention of the 510 cases in Hospital (including cases from Heywood and Middleton) works out at precisely six weeks, which used to be considered the normal quarantine period. But in recent years the experience of some of our best-managed Fever Hospitals, as well as medical science, throws considerable doubt on the advisability of still retaining the old time-worn policy of six weeks quarantine of every case in a fever hospital ; and on the basis of much experimental data founded on reasons both medical and economical the tendency now is in many of our hospitals to shorten the period of quarantine. This is done as regards all normal cases uncomplicated by nose, throat or ear discharges, which are infectious, or other post-scarlatinal complications, while less importance than formerly is now attached to the infectivity of desquamation or peeling after a certain stage of the disease. On the other hand the more unfortunate and complicated cases may often have to remain not only for six weeks but for months in Hospital.

PRACTICE AT MARLAND HOSPITAL.

At Marland Hospital during the past year the above practice has been followed. The conditions of each case were carefully considered, and if it appeared advisable to shorten the period of detention it was done. We have kept under observation for some time many such earlier discharged cases, as well as those detained in hospital for longer periods ; and I venture to think that, given adequate after-care at home, which is equally essential in all cases, the results of shorter detention are very satisfactory. Further, if in many cases the period of detention can be reduced there is a direct and considerable economic gain ; and it may be stated that if this policy had not been pursued it would have been impossible for such a large number of cases to have had the benefit of hospital accommodation and treatment during the past year at Marland Hospital.

Diphtheria.

59 cases of this disease were notified during the past year, as compared with 51 cases during the previous year 1912, and an average of 65 cases during the ten years 1903-1912. According to Table III. the cases during the past year occurred chiefly in the Castleton wards of the Borough, where 41 out of the total 59 cases were reported, although no link of infection could be traced in the district.

The milk supply did not appear to be implicated, nor was any particular school affected.

33, or 55 per cent., of the cases reported were removed to Marland Hospital for treatment. There were 8 deaths during the year, or a case mortality of 13.6 per cent., as against 51 cases with 10 deaths, a case mortality of 20 per cent. during the previous year. The mortality per 100 cases notified during 1913 was only about one-half the average case mortality in Diphtheria for this Borough.

Diphtheria Anti-Toxin.

With a view to facilitating the prompt use of this anti-toxin in the case of persons who may be attacked by Diphtheria, or exposed to infection, the Sanitary Authority still keep a supply at the Public Health Office, and also at the Infectious Diseases Hospital (Marland) and at the Borough Police (Central) Office, where it can be obtained at almost any hour by any medical man for use in Borough cases. During the year no less than 170 tubes, or 340,000 units, of this anti-toxin were given out for use at the Hospital and at the different houses where the cases occurred.

Typhoid or Enteric Fever.

This disease shows a slight increase during the year, 16 cases against 13 cases in 1912; but this number is below the average for this Borough. One half the cases occurred in two wards, Castleton West and Castleton Moor (4 in each), and the remaining cases were distributed in different parts of the town.

The Sanitary Inspectors made full enquiries as to the milk, water and food supply in each case; and also the sanitary arrangements of each house were examined, but only in one was any serious sanitary defects found. The owner was at once communicated with and the sanitary arrangements were overhauled so as to meet modern sanitary requirements.

Two of the cases notified were infected by another case in the same house, but in the remaining 14 cases the source of infection could not be satisfactorily traced.

There were four deaths during the year from this disease.

Eight of the cases notified were removed for treatment to Marland Hospital.

Typhus Fever.

No cases of this disease have been reported in Rochdale since 1898, when there were 6 cases. In England and Wales 18 cases were notified, as compared with 31 in 1912, and 65 in 1911.

Puerperal Fever.

7 cases of this disease with 2 deaths were reported as compared with 8 cases and 4 deaths during the year 1912. Each case was investigated, but there did not appear to be any link of infection. Table III. gives the ages of the patients and the ward incidence. All possible precautions were taken against the spread of this disease, from case to case, by Midwives. See Section III. of this report, part relating to work under the Midwives Act.

Erysipelas.

The incidence of this disease was greater during 1913 than in any other year since 1906, 67 cases notified as against 52 in 1912, and an average of 61 for the preceding ten years 1903-1912. There was 1 death.

Acute Poliomyelitis.

The year 1913 is the first complete year of compulsory notification of this disease. It has long been known under the name "Infantile Paralysis," as a form of paralysis of which sporadic cases occur chiefly in children and less frequently in adults. 2 cases have been reported, but unfortunately one case, a child age 9 years, proved fatal.

Cerebro-Spinal Fever.

This disease was also compulsorily notifiable for the first complete year during 1913. Two cases were reported, but unfortunately one proved fatal. The other case, however, made a complete recovery.

Comparative Incidence Rate of Notifiable Infectious Diseases.

The following Table V. has been compiled from the report of the Local Government Board as a comparison of the incidence of notifiable infectious diseases in the twelve large neighbouring manufacturing towns with Rochdale.

TABLE V.

Incidence of Notifiable Infectious Diseases in 12 neighbouring towns during the year 1913.

(Rate per 1,000 of population. Estimate middle of 1912.)

Town	Estimated Population to the middle of 1912.	Small-pox		Scarlet Fever		Diphth-theria		Typhoid Fever		Puerperal Fever		Erysipelas	
		Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Bury	59,106	...	...	289	5.06	68	1.15	8	0.14	6	0.10	28	0.47
Blackburn	133,560	...	...	268	2.01	80	0.60	31	0.23	8	0.26	91	0.68
Bolton	182,524	...	...	209	1.15	124	0.68	56	0.31	4	0.02	71	0.39
Burnley	108,012	...	...	206	1.91	178	1.65	20	0.19	6	0.06	175	1.62
Halifax	101,104	...	...	112	1.11	112	1.11	17	0.17	7	0.07	57	0.56
Huddersfield	109,513	...	...	287	2.62	62	0.57	20	0.18	10	0.09	68	0.62
Oldham	148,839	8	0.05	938	6.30	93	0.62	14	0.09	11	0.07	121	0.81
Preston	117,631	...	...	777	6.61	280	2.38	47	0.40	7	0.06	108	0.92
Stockport	110,787	...	...	179	1.59	94	0.84	47	0.42	10	0.09	66	0.59
St. Helens	98,159	...	...	736	7.50	161	1.64	26	0.26	5	0.05	76	0.77
Wigan	90,042	...	...	73	0.81	34	0.38	97	1.08	6	0.07	57	0.63
Warrington	73,215	...	...	240	3.28	108	1.48	29	0.40	7	0.10	54	0.74
Average— 12 Towns	...	0.7	...	360	3.33	116	1.09	34	0.32	7	0.09	81	0.73
ROCHDALE	93,420	...	...	565	6.04	59	0.63	16	0.17	7	0.07	67	0.72

In the Scarlet Fever group the attack-rate per 1,000 of estimated population ranges from 0.81 (Wigan) to 7.50 (St. Helens), with an average rate of 3.33 per 1,000 of population, while Rochdale's attack rate is 6.04 per 1,000. Only St. Helens and Preston had a higher Scarlet Fever attack-rate than Rochdale. As regards the other groups, Rochdale is below the average in each case.

Administrative Procedure.

In the case of the diseases dealt with under the heading "Notifiable Infectious Diseases" the following procedure is usually adopted:—

- (1) VISITING AND INSPECTION.—On receipt of a notification from the medical man, the house where the disease exists is visited by the Sanitary Inspector. Enquiries are made as to means of isolation, water, milk and other food supplies bearing on the disease, school attendance, &c., and a general inspection is made of the house and sanitary arrangements. Printed and verbal instructions are given regarding isolation and disinfection.
- (2) DISINFECTION.—In all cases of infectious disease, after removal to Hospital or the termination of the case, the premises are fumigated with either Formalin or sulphur gas, chiefly the former. The clothing and bedding which has been in contact with the patient is removed and disinfected by means of a Washington Lyons Steam Disinfector. Disinfectants are supplied free to each house. In the case of Typhoid Fever at a house having a pail closet as sanitary convenience, a special pail, with cover, is supplied for the purpose of receiving all excrementitious matter from the patient. The pail is removed to the Destructor Works three times per week, the contents destroyed, and the pail thoroughly disinfected.
- (3) As a further preventative measure against the spread of infectious disease in the elementary and other schools, a complete system of daily notification between the Public Health Department and the Head Teacher, as to exclusion and re-admittance of scholars, is now in operation.

(b) NON-NOTIFIABLE INFECTIOUS DISEASES.

Included under this heading are the three infectious diseases, Measles, Whooping Cough, and Chicken-pox, and the information thus obtained is chiefly supplied through the elementary schools in the Borough. Taking these three diseases together, 579 cases have been reported as compared with 1,943 cases during 1912. Each disease showed a considerable decrease during the past year.

Measles was very prevalent during 1912, when no less than 1,246 cases were reported, but for the past year 1913 only 324 cases were reported.

According to Table III., Spotland West, Wardleworth South and Castleton South were the wards chiefly affected. 9 deaths were registered as due to Measles, equal to a death-rate of 0.10 per 1,000, as compared with 29 deaths and a death-rate of 0.31 in 1912. In England and Wales the death-rate was 0.28 per 1,000, and in the 96 Great Towns of England and Wales 0.34 per 1,000.

Disinfection of the house is carried out by the Health Department in cases where application is made by the medical man or householder.

Whooping Cough.

Compared with the preceding year 1912 this disease shows a considerable decrease in number of cases reported, 90 as against 292 cases. There were only 3 deaths recorded as due to this cause, a death-rate of 0.03 per 1,000 of population, while in 1912, 26 deaths were registered, equal to 0.28 per 1,000. In England and Wales the rate was 0.14, and in the 96 Great Towns of England and Wales 0.17 per 1,000.

Chicken-Pox.

165 cases were reported as against 405 cases during 1912. There have been no deaths registered in Rochdale as due to Chicken-pox since 1905.

Diarrhoea and Enteritis or Summer Diarrhoea.

Since and including year 1911, deaths registered as due to any of the following diseases are classified under this heading in accordance with the International List of Causes of Death as approved by the Local Government Board and Registrar-General:—(a) Infective Enteritis; (b) Diarrhoea; (c) Enteritis; (d) Gastro-enteritis; (e) Dyspepsia (under 2 years); (f) Colic; (g) Ulcer of Intestines; and (h) Duodenal Ulcer. These terms are substantially identical, but only such deaths as are of children under two years of age are grouped together and classed as one of the seven principal zymotic diseases.

The deaths thus recorded are set out below in comparison with the year 1912.

	NO. OF DEATHS.					
	Under 2 years		Over 2 years of age		All Ages	
	1913	1912	1913	1912	1913	1912
(a and b) Diarrhoea and Infective Enteritis ...	28	10	7	4	35	14
(c to h) Enteritis, etc. ...	18	9	10	3	28	12
TOTAL ...	46	19	17	7	63	26

An increase in the mortality from these diseases during 1913 is thus recorded in the above Table, but compared with 1909, when there was a severe epidemic, there is a decrease of 37 deaths.

The mortality rate from Diarrhoea and Enteritis (under 2 years) during the past year calculated per 1,000 births registered is 23.7, as compared with 29.3 for the 96 Great Towns of England and Wales, and 23.4 for the whole of England and Wales.

INFECTIOUS DISEASES HOSPITAL.

The Hospital at Marland now serves the Boroughs of Heywood and Middleton as well as Rochdale Borough, the Union Workhouse and the Cottage Homes at Dearnley ; also arrangements have now been made for the treatment of some of the cases from Milnrow district. Negotiations are also in progress for the isolation and treatment of Small-pox cases elsewhere than at Marland Hospital.

Cases Treated.

The past year ending December 31st, 1913, has been a record, 568 cases being admitted to Hospital as compared with 423 in 1912, and an average of 290 cases during ten years 1903-1912. Full information as to the different diseases treated, average stay in Hospital, and age of each patient is set out in the following Table.

80 of the cases were from the neighbouring districts, and the remaining 488 from within the Borough. Table III. shows the wards from which these latter cases were removed to Hospital.

TABLE VII.

ROCHDALE INFECTIOUS DISEASES HOSPITAL.

Return of Patients for year ending 31st December, 1913. Marland Hospital.

DISEASE	In Hospital on 31st December 1912	Admitted during the Year	Discharged	Died	Remain- ing in Hospital at end of Year	Average stay in Hospital of Patients Disch'rg'd — Days	Ages of Patients Admitted		
							Under 5 Years	5—15 Years	Above 15 Years
SMALL-POX .....	...	...	...	...	...	...	...	...	...
MEASLES.....	...	1	1	...	...	16	...	1	...
SCARLET FEVER	47	510	466	5	86	41	120	337	54
DIPHTHERIA	1	37	32	3	3	27	13	13	11
TYPHOID FEVER	1	19	15	4	1	44	1	2	15
TYPHUS FEVER .....	...	...	...	...	...	...	...	...	...
ERYSIPELAS .....	...	...	...	...	...	...	...	...	...
WHOOPIING COUGH .....	...	...	...	...	...	...	...	...	...
PUERPERAL FEVER.....	...	...	...	...	...	...	...	...	...
Epid. Cerebro-Spinal Menin- gitis .....	...	...	...	...	...	...	...	...	...
Total Zymotic Cases	49	567	514	12	90	...	134	353	80
<i>In Quarantine</i> .....	...	1	1	...	...	19	...	1	...
TOTAL	49	568	515	12	90	...	134	354	80

Particulars of Cases admitted from outside Borough.

Town	Scarlet Fever		Diphtheria		Typhoid Fever		Sus.Small-pox		Totals	
	Cases	Death	Cases	Death	Cases	Death	Cases	Death	Cases	Death
MIDDLETON	50	1	4	...	4	...	1	...	59	1
HEYWOOD	14	...	...	...	4	1	...	...	18	1
MILNROW ... ..	...	...	...	...	2	...	...	...	2	...
WARDLE ... ..	...	...	...	...	1	1	...	...	1	1
TOTAL	64	1	4	...	11	2	1	...	80	3

Average daily number of patients in Hospital 58, of whom 27 were males, and 31 females. Number of cases admitted from outside Borough, 80 (see table above). Maximum daily number of patients in Hospital 91 on 31st December. Minimum daily number of patients in Hospital 37, on 10th and 11th May.

The subjoined Table VIIA. gives the number of cases of each disease treated at Marland Hospital each year since 1903. The case mortality or deaths per 100 cases was extremely low during 1913, being 2.1 as against 3.8 during 1912 and an average of 5.9 per 100 cases during ten years 1903-1912, although the number of cases were almost double.

TABLE VIIa.
Number of cases treated at Marland Hospital during 11 years 1903-1913.

Disease	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	Average 10 years 1903-12	1913
SMALL-POX	143	6	16	17	1	1	1	...	6	...	19	...
SCARLET FEVER	102	361	309	255	154	124	146	250	227	375	230	510
DIPHTHERIA ... ..	...	14	5	24	54	43	43	21	23	32	26	37
TYPHOID FEVER	9	7	17	14	9	20	16	13	4	13	12	19
OTHER DISEASES	7	1	1	2	3	2	6	...	4	3	3	2
TOTAL CASES	261	389	348	312	221	190	212	284	264	423	290	568
NO. OF DEATHS	18	18	16	21	22	22	19	15	8	16	17	12
Case Mortality per cent.	6.9	4.6	4.6	6.7	10.0	11.6	9.0	5.3	3.0	3.8	5.9	2.1

Hospital Expenditure.

The following abstract has been prepared from the Borough Treasurer's statement of accounts. The large increase in the expenditure during the past year is due to the increased number of cases treated and to cost of painting work.

Items	Financial Year ending						
	March, 1914			March, 1913			
	£	s.	d.	£	s.	d.	
Wages of Staff	632	11	1	575	2	1	
Rates, Taxes, Insurance, &c.	141	5	1	117	18	10	
Gas, Water, Coal and Coke, etc.	335	3	0	344	17	3	
Provisions and Drugs, &c.	1118	4	0	855	2	6	
Horse Hire for Ambulance	108	2	4	84	5	6	
General Repairs and Alterations	482	7	0	86	12	9	
Establishment Requisites, &c.	369	11	10	163	7	7	
Interest on Mortgage Loans	93	15	8	92	3	0	
Sinking Fund Proportion	8	3	7	8	3	7	
Yearly Total ... ..Gross	£3289	3	7	£2327	13	1	

Table showing Average cost per Person (incl. staff) per day for Provisions and Drugs.

Financial Year ending	Expenditure on Provisions and Drugs			Average Daily Expenditure on Provisions and Drugs			Average Daily Number of Patients and Staff		Average Cost per Person per day for Provisions and Drugs
	£	s.	d.	£	s.	d.	P.	S.	
MARCH 31ST, 1912 (Patients admitted 224)	656	3	10	1	15	10	26	44	9¼d.
MARCH 31ST, 1913 (Patients admitted 473)	855	2	6	2	6	10¼	46	65	8½d.
MARCH 31ST, 1913 (Patients admitted 654)	1118	4	0	3	1	3¼	71	94	7⅞d.

Tuberculosis.

Notifications.

The first step towards compulsory notification of pulmonary tuberculosis throughout England and Wales was the issue by the Local Government Board of the Public Health (Tuberculosis) Regulations, 1908, which came into operation on January 1st, 1909, and applied only to the notification of cases occurring amongst the inmates of Poor Law Institutions or persons receiving out-door relief from the Board of Guardians.

Since then the following three sets of Regulations have been issued making the system of notification complete throughout England and Wales—

- (a) Public Health (Tuberculosis in Hospital) Regulations, 1911, extending notification to cases occurring amongst in-patients and out-patients in Hospitals, from May 1st, 1911 ;
- (b) Public Health (Tuberculosis) Regulations, 1911, extending notification to all cases of pulmonary tuberculosis, from 1st January, 1912 ;
- (c) Public Health (Tuberculosis) Regulations, 1912—The regulations consolidated and amended all previous regulations relating to the notification of pulmonary tuberculosis, and also made compulsory the notification of non-pulmonary tuberculosis, from 1st February, 1913. These also provide for a weekly return to the Medical Officer of Health of all cases admitted to or cases discharged from Sanatoria or Poor Law Institutions.

The total cases of pulmonary tuberculosis thus notified during 1913 was 195 (Males 97, Females 98), as compared with 207 cases (Males 107, Females 100) during the previous year 1912. The following is a summary of the cases notified during the past five years.

					1913	1912	1911	1910	1909
PULMONARY TUBERCULOSIS—									
I.—Compulsory Notifications	...	...	...	...	257	290	125	81	130
Less Duplicates	...	...	...	...	62	83	51	22	34
Actual Cases	...	...	...	...	195	207	74	59	96
II.—Voluntary Notifications	...	...	...	...	...	...	35	20	13
Total Cases each year	...	...	...	...	195	*207	109	79	109

* First complete year of compulsory notification.

Of the 195 cases during the past year, 21 were reported from Common Lodging-houses and 7 from Public Institutions. The whole of these notifications have been tabulated in Tables III. and IV. to show the age and ward incidence and the months during which the notifications were received. The lowest number of cases in any one ward was 8 in Castleton West, and the highest number was in Wardleworth South with 30 cases, Castleton South and Spotland East coming next with 28 and 22 cases respectively.

Investigation of cases notified.

The Health Visitors or Sanitary Inspectors have during the past year continued their investigations into cases notified and cases of death from Phthisis, and from data thus collected Tables VIII. and X. have been compiled so as to give some indication of the conditions and circumstances of the homes in which the cases occurred.

As regards the 28 cases reported from Common Lodging-houses and Public Institutions, no complete information as regards family history and other circumstances could be ascertained on account of the migratory nature of such cases.

TABLE VIII.

PHTHISIS.—Particulars of Cases notified during the year 1913

SIZE OF HOUSE No. OF ROOMS	No. of Notifica- tions		AGES						TYPE OF HOUSE				Average Rent	PARTICULARS REGARDING HOUSE								Treatment		Occupa- ation		Means of Family or Patient			Habits		Sleeping Accommo- dation																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
														Cleanliness				Light		Sunshine														Means of Ventilation																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	Male	Female	Under 5 yrs.	5-15 yrs.	15-25 yrs.	25-45 yrs.	45-65 yrs.	65 yrs. & over	Back-to-Back	Through	No back door or windows	Not Through at back	No. Damp.	Clean	Fairly Clean	Dirty	Sufficient	Insufficient	Good	Fair	Sufficient	Insufficient	Properly Used	Neglected	Hospital	At Home	Both	Outdoor	Indoor	Good	Fair	Poor	Cases having Poor Law Relief	Good	Indifferent	Separate Bedroom	Separate Bed	Joint Bedroom																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	1 Room	2 Room	3 Room	4 Room	5 Room	6 Rooms & Over	*COMMON LODGING HOUSES	*PUBLIC INSTITUTIONS	ALL HOUSES—TOTALS	ALL HOUSES—TOTALS	1912	1911																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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* No complete information regarding these cases.

TABLE IX.

PHTHISIS 1913.—Particulars of Occupation of cases notified, and proportion of Deaths of cases notified to cases un-notified.

OCCUPATION	CASES NOTIFIED.			DEATHS				Total Deaths Registered	
	M.	F.	Total	Of Cases Notified		Of Cases Not notified		M.	F.
				M.	F.	M.	F.		
Cotton Operatives.....	16	50	66	8	25	1	1	9	26
Labourers	17	...	17	12	...	...	...	12	...
School Children	6	11	17	...	3	1	...	1	3
Housework .....	...	15	15	...	11	...	6	...	17
Iron Workers.....	8	...	8	6	...	...	...	6	...
Shop Assistants	3	3	6	3	1	...	...	3	1
Joiners	4	...	4	...	...	...	...	...	...
Charing .....	...	3	3	...	3	...	1	...	4
Clerks	4	...	4	...	...	...	...	...	...
Woollen Operatives	1	2	3	...	1	...	...	...	1
Watch Maker and Repairer.....	2	...	2	2	...	...	...	2	...
Painters	2	...	2	1	...	...	...	1	...
Stokers	2	...	2	...	...	...	...	...	...
Engineers	2	...	2	...	...	...	...	...	...
Teachers	1	1	2	...	...	...	...	...	...
Domestic Servants ..	...	2	2	...	2	...	...	...	2
Bricklayer	1	...	1	1	...	...	...	1	...
Tram Conductor	1	...	1	1	...	...	...	1	...
Tailor	1	...	1	1	...	...	...	1	...
Pianoforte Builder	1	...	1	1	...	...	...	1	...
Lithographer	1	...	1	1	...	...	...	1	...
Limewasher	1	...	1	...	...	...	...	...	...
Soldier	1	...	1	...	...	...	...	...	...
Carter	1	...	1	...	...	...	...	...	...
Dressmaker .....	...	1	1	...	...	...	...	...	...
Auctioneer	1	...	1	...	...	...	...	...	...
Brass Finisher	1	...	1	...	...	...	...	...	...
Hawker	1	...	1	...	...	...	...	...	...
Salesman	1	...	1	...	...	...	...	...	...
Plumber	1	...	1	...	...	...	...	...	...
Stone Masons.....	1	...	1	3	...	1	...	4	...
Confectioner .....	...	...	...	...	...	...	1	...	1
Tobacco Works.....	...	...	...	...	...	...	1	...	1
Shirt Maker .....	...	...	...	...	1	...	...	...	1
No Occupation	2	4	6	2	...	...	...	2	...
TOTALS	84	92	176	43	47	3	10	46	57
Cases which cannot be traced— Chiefly from Common Lodging Houses	13	6	19	...	...	...	...	...	...
TOTALS	97	98	195	43	47	3	10	46	57

An examination of Table VIII. shows (a) that more than one-half of the cases notified were unable to have a separate bedroom, and the majority of these occupied a bed along with another member of the family; (b) that about one-sixth of the cases occurred in damp houses; (c) that the means of ventilation in about one-fifth of the cases was not used to the extent desirable; and (d) that nearly two-thirds of the cases were classed as of "poor means."

The corresponding figures for the previous two years 1911 and 1912 have been entered under each heading in Tables VIII. and X. for comparison, but no appreciable difference in the proportion of each is shown.

Table X., which gives similar particulars to Table VIII. except that it relates to Phthisis deaths, includes many of the cases shown in the latter Table, as the conditions at the time of death are in many cases entirely changed. Both Tables bring out similar features. It may be noted, however, that 13 of the deaths registered as due to this cause were never notified before death, although compulsory notification was in operation.

Occupation.

The occupation of each case notified and of the death cases is shown in Table IX.

Non-Pulmonary Tuberculosis.

164 cases of Tuberculosis other than pulmonary have been notified in Rochdale since notification became compulsory on the 1st February, 1913. Tables III. and IV. show the ward incidence and the months during which the cases were reported. The months of February and March had the highest number of cases notified, but many of these are probably old cases reported when the new regulations came into operation. The following Table classifies the notifications according to age and localization of the disease.

TABLE XI.

Localization of Disease	Total	Ages—Years						
		Under 1 year	1-5	5-15	15-15	25-45	45-65	65 and over
Glands	60	1	4	28	17	7	1	2
Bone	60	...	3	19	14	14	6	4
Skin	7	...	1	...	1	2	3	...
Abdominal	23	6	11	3	3	...	...	...
Other Forms	14	1	4	5	1	...	2	1
TOTALS	164	8	23	55	36	23	12	7

Mortality from Tuberculosis.

(a) Pulmonary Tuberculosis.

103 deaths (46 Males and 57 Females) have been registered during 1913, equal to a death-rate of 1.10 per 1,000 of population, which is the same as for the previous year, but slightly below the average for the preceding five years 1908-1912 (1.12 per 1,000). In other words, out of every 14 deaths registered in Rochdale during the past year due to various causes, one was due to pulmonary tuberculosis, and this proportion was the same for the preceding five years.

Tables III. and IV. show the distribution of the deaths in the various wards, months, and age periods.

According to Table I., Section I., Wardleworth South had the highest death-rate 1.80 per 1,000, and Wardleworth East the next with 1.72 per 1,000, while the lowest rate was in Castleton South ward 0.81 per 1,000.

Compared with the average death-rate from Phthisis in ten of the neighbouring manufacturing towns (Table V., Section I.) the rate for Rochdale during the past year is slightly above the average—1.10 per 1,000 as against 1.04 per 1,000. Still, in the report of the Local Government Board 1912-1913, Rochdale is classed as one of the 15 towns in the whole of England and Wales with the lowest mortality from Phthisis during the year 1911, and since then the rate has not shown any appreciable increase, so that our position may be regarded as fairly satisfactory when compared with the country as a whole.

(b) Other Forms of Tuberculosis.

The number of deaths registered under this heading was 45 (Males 20, Females 25), equal to a death-rate of 0.48 per 1,000, which is a slight increase over an average of 0.45 per 1,000 during five years 1908-1912.

The average death-rate from this cause in the nine neighbouring towns was 0.48 per 1,000.

TABLE XII.

Year	Number of Deaths				Proportion of Deaths to Deaths from all causes		Death-Rate per 1,000 of Est. Population	
	Phthisis	Other Tubercul'r Diseases	All Tubercul'r Diseases	All Causes	Phthisis	All Tubercul'r Diseases	Phthisis	Other Tubercul'r Diseases
1908	122	44	166	1632	1-13	1-10	1-37	0-49
1909	97	28	125	1442	1-15	1-12	1-08	0-31
1910	95	49	144	1361	1-14	1-9	1-05	0-54
1911	91	45	136	1404	1-15	1-10	0-99	0-49
1912	102	39	141	1384	1-14	1-10	1-10	0-42
Average 5 years...	101	41	142	1444	1-14	1-10	1-12	0-45
1913	103	45	148	1434	1-14	1-10	1-10	0-48

Administrative Procedure.

The administrative procedure for the control of Phthisis and other Tubercular diseases in this Borough may be summarised under the following headings :—

I.—LIVING CASES.

- (a) These on notification are visited by the Lady Health Visitors or the Tuberculosis Nurse as frequently as possible according to the circumstances of the case. Advice is given personally and by card regarding such precautions as should be taken in coughing and expectorating to prevent the infection of others ; the relative advantages and proper methods of dealing with linen and paper handkerchiefs and spittoons ; the value of sunlight, fresh air and proper methods of ventilating living rooms and bedrooms ; the value of wet cleansing of rooms to avoid dust ; the necessity for patient to have separate bedroom when possible ; proper methods of washing and disinfecting clothes, floors, &c., and any other advice and assistance which the circumstances of the case may demand.
- (b) All sputum bottles and disinfectants are supplied by the Public Health Department.
- (c) Upon removal of any patient from one house to another, the house vacated is properly disinfected by the Sanitary Staff before re-occupation by another tenant.

- (d) The bacteriological examination of sputa is made free of charge at the Municipal Bacteriological Laboratory, Town Hall, for all medical men practicing within the Borough. For those outside the Borough. For those outside the Borough a nominal charge is made.
- (e) Non-insured persons who were not entitled to National Insurance benefit, but whose circumstances demanded consideration and amelioration, were reported to the Charity Organisation Society or other voluntary aid societies, and many of these persons have been sent for a time to either Delamere, Meathop, or Bowden Sanatorium; whilst others have been assisted by means of nourishments.

II.—DEATH CASES.

House, Clothes, and furniture are disinfected by the Sanitary Staff.

INSURANCE ACT—TUBERCULOSIS SCHEME.

The subject of Tuberculosis in the preceding four Annual Reports has been discussed in much detail and from many points of view, and it is much to be regretted that at time of writing we are not in a position to report such progress as is desirable and which has been anticipated by the Health Committee of this Corporation, towards the provision of a complete local self-contained scheme for dealing with all forms of Tuberculosis.

During the past four years I have consistently advocated the merits of such a scheme for this district, with co-operation in so far as it can be made to secure greater benefits and greater economy for the combined area. Some of the advantages of such a scheme are as follows :—

- (1) In a complete local scheme the circumstances and conditions can be made such that each patient must endeavour to derive the greatest benefits from treatment whether domiciliary, dispensary, curative or in hospital beds, or any combination of these, as it provides complete and continuous supervision and easy transference of patients; while at the same time the Tuberculosis staff are always informed as to the position in the scheme and state of health of each patient, and thereby are always in a position of outlook so as to prevent, as far as possible, relapses, and thus prolong the working life of the patients.
- (2) It tends to preserve the working and clinical interest of the local Tuberculosis staff and medical men in their patients, and to stimulate the more scientific study of the disease.
- (3) Patients, especially working people, will go much more readily to a local institution where they are not far removed from their homes, friends and relatives, and where they may be visited on appointed days or otherwise.
- (4) Our experience in sending cases to other sanatoria does not appear satisfactory. The management of any Sanatorium must have some regard to the class of patients and the manners and institutions with which they have been accustomed; while on the other hand many patients have to be taught to submit to the discipline and regime of Sanatorium treatment. Hence there has been much trouble with the friends and relatives of those removed, especially in cases of illness and death, while some patients have refused to submit to the discipline and treatment provided, and others have peremptorily left and returned home.
- (5) Difficulties, trouble and expense of transit and conveyance are avoided.
- (6) As isolated elements, Domiciliary, Dispensary and Sanatorium treatment are relatively limited in their possibilities for good, but in proportion as they are intimately connected and co-ordinated they each become more serviceable; and it can only be a completely local scheme that such harmonious co-ordination is in the highest degree possible.

The Dispensary.

The first unit of this scheme—the Tuberculosis Dispensary, has been provided, and was opened in January of this year. The building is situated at the junction of Yorkshire-street and Elliott-street, is central, spacious, and well equipped.

The Sanatorium.

During the past year the provision of Sanatorium treatment has received the serious consideration of the Health Committee. Many sites have been visited—including 15 local sites; and I venture to think that in the end the consensus of opinion was strongly in favour of Springfield Estate as possessing advantages over every other site visited.

The estate extends to about 100 acres, and the mansion house would provide an excellent administrative block. Some parts are admirably adapted for the establishment of working colonies for consumptives; while it also provides a very suitable site for an open-air day school, and one domestic administrative staff would serve both Sanatorium and Day School.

On application being made to the Local Government Board for powers to purchase this estate, an Enquiry was held in the Town Hall on the 7th April, 1914, and since then the Board have intimated that there are no objections on medical grounds to the use of a part of this estate as a Sanatorium. The proposed Sanatorium will include provision for the reception and treatment of all forms of Tuberculosis as set out in the memorandum of the Local Government Board. The Tuberculosis Officer will be resident. His whole time will be given meantime to this work, which will include supervision of Dispensary, Sanatorium, Domiciliary and after-care treatment in so far and in such manner as may be arranged.

During the year provision for Sanatorium treatment was made by the Local Insurance Committee with the Bury Joint Hospital Board; and 36 cases have been sent to the Aitken Sanatorium at Bury, while 56 have been under Domiciliary treatment. Also during a part of the year a Tuberculosis Nurse was provided by the Insurance Committee, who devoted her whole time to the work of visitation. The provision of Tuberculosis Nurses has now been taken over by the Health Committee, and one has been already appointed.

Precautions against the spread of Consumption.

The following pamphlet as regards precautions against the spread of Consumption has been prepared and distributed from the Dispensary by the Tuberculosis Nurses and Health Visitors:—

The following precautions are given not only for the benefit of those who unfortunately may be suffering from Consumption, but they are given also in the interests of the family and others. It is only by carrying out these precautions with zeal and fidelity that the spread of the disease can be prevented.

(1) Consumption is a preventable disease, and in the earlier stages may be curable. It is not hereditary.

(2) The best way to prevent Consumption is to keep in good health by living a well-regulated and hygienic life. One of the chief causes which predisposes, or makes a person more liable to this disease, is a weakened or low state of health, which unfortunately is too often brought about by intemperance, and living in ill-ventilated, dirty, dark and damp houses, with often bad and insufficient food.

(3) Consumption is an infectious disease, and is spread by germs which are found in the sputum or spit of persons suffering from Consumption.

(4) These germs may remain alive for weeks in the sputum, even when it is dried and carried about as dust.

(5) It is thus chiefly through the sputum that other persons become infected, either (a) by contact with the moist sputum, as in lip contact, using eating utensils in common, or standing over or in front of the patient when coughing, or (b) inhalation of dried sputum in the form of dust. The phlegm must not be swallowed, or the disease may spread to the bowels and other parts of the body.

(6) In order then to prevent the infection of others, it is very important that the sputum and all coughed-up matter of infected persons should be collected, and destroyed or disinfected.

(7) Spitting on the floors of rooms, workshops, tramcars, railway carriages, cabs, or on the streets (especially the foot-pavement), or other occupied or frequented places such as schools, churches, theatres, railway stations, etc., must be avoided. The sputum is both offensive and dangerous to others, for it may dry and be carried about and inhaled as fine particles of dust by healthy persons.

(8) For receiving the sputum, when the patient is in-doors, a cup or mug containing disinfectant solution may be used ; and when out-doors a small bottle-shaped pocket spittoon. Such mugs and spittoons should be cleansed at least once a day with boiling water and a little disinfectant solution, and finally well rinsed with boiling water or disinfectant solution. The washings should be carefully emptied into the water-closet or slop pail, and must not be poured into any sink or thrown out. If expectoration has been accidentally deposited on the floor or other object, it should be wiped up and burned, and the surface of the floor or object cleansed with strong disinfectant. Rooms which have been long occupied by a consumptive patient should, before occupation by someone else, be carefully disinfected, just as in the case of other infectious diseases.

(9) Handkerchiefs, if used for receiving sputum, should be carried in a pocket containing nothing else, and the pocket must be lined with glazed waterproof material, which should be frequently sponged with disinfectant solution. The handkerchief should on no account be in use longer than one day, otherwise the sputum on the handkerchief will next day have dried, and be detachable as dust. Handkerchiefs should be placed in disinfectant solution overnight, before being washed. Rag or paper handkerchiefs may be used, and burned at the close of the day.

(10) A separate set of eating utensils—spoons, knives, forks, cups, and tumblers—should be kept for the sole use of the patient, and should be separately washed. Ordinary washing does not remove all the germs from the surface of eating utensils, hence the need for a separate set.

(11) As the bed-clothing of the patient tends to become infected, the pillow-covers and sheets should be changed every week, and boiled in course of washing ; and the blankets should be washed once a month, after being steeped for two hours in disinfectant solution.

(12) The rooms occupied by the patient should be cleaned every day. **To avoid raising dust, which may carry infection, the furniture should be dusted with a damp cloth,** and the floor and woodwork should be washed every week. If carpeted, the floor, before being swept, should be sprinkled with wet tea leaves or wet sawdust. Carpet sweepers which collect the dust in the course of sweeping are preferable to ordinary brushes. **All the dust should be burned.**

(15) **The patient should have a separate bed, and should also have a separate bedroom.**

(14) The bedroom should be dry and airy, and provided with a fire-place, and should, if possible, face the sun. The bed should not be enclosed or curtained.

(15) The furnishings of the bedroom should be few and simple, so as to allow the room being thoroughly and easily cleaned. Therefore, bed or window curtains are not recommended, and the floor should preferably be bare, or covered with linoleum or similar material. One or two small rugs may be used.

(16) As a constant supply of fresh air is all important in promoting the recovery of the patient, and in preventing the infection of others, the **windows of bedroom and sitting-room should be kept constantly open, even in winter.** In summer the sashes should be so drawn as to overlap completely at middle of window, leaving a large opening at top and bottom. **Sunshine should also be allowed to enter freely.**

(17) The patient should avoid kissing others on the lips.

(18) Consumptive mothers should not suckle their children, and consumptive mothers or nurses should not, in feeding infants, touch the food or the spoon, or the teat of the feeding-bottle, with their own mouths.

(19) The ordinary breath of the patient is probably not infectious ; but the air expired in coughing, being charged with droplets of sputum, is infectious. **The patient should always hold a handkerchief over his mouth in coughing even when no person is present.**

(20) The Public Health Department will gladly assist in disinfecting rooms, bedding, and clothing.

(21) When the patient ceases to occupy any room or house, notice must forthwith be sent to the Public Health Department, so that the room or house may be disinfected before being occupied by others.

A. G. ANDERSON, M.D., D.Sc.,

Medical Officer of Health.

SECTION III.

Departmental Work.

WORK OF LADY HEALTH VISITORS.

The duties of the Health Visitors in this Borough chiefly consists of the care of the infants with the view of reducing infantile mortality ; also the supervision of midwives.

A statistical summary of these and kindred duties are given for the past and two preceding years in the subjoined table :—

Summary of Health Visitors' Visits.

	1913	1912	1911
Total Visits	6,416	5,500	5,499
Revisits for purpose of supervising the carrying out of the suggestions and advice given—especially regarding infant nursing and feeding ...	3,759	3,035	2,821
Births	2,112	1,966	2,039
Infant Deaths	186	181	207
Diarrhœa Deaths (over 1 year of age)	9	1	12
Phthisis Deaths	85	88	70
House to House Visits ... ..	...	...	7
Puerperal Fever	6	8	10
Diarrhœa and Enteritis ... ..	...	...	208
Complaints	2	9	9
Midwives	67	32	9
Scarlet Fever	8	...	...
Dirty Houses, &c.	3	...	...
Phthisis Notifications	177	180	107
Other forms of Tuberculosis	2	...	...

The work of the Health Visitor has been very much under discussion in recent years, and what she may be expected to accomplish as well as the method and manner of accomplishment has been dealt with in much detail. That there is a great field of work for the Health Visitor no one with any public health experience can doubt ; but any real success in this field must depend largely on the personality of the Visitor and not on any rules or formula which may be devised. A Health Visitor may be expected to be a woman of wide study in the science of Hygiene and practical sanitation as well as versed in the general rules of health and preventive medicine ; and further she may be expected to be tactful and diplomatic and to know something of the culture of the finer arts and of the psychology of the human mind. But withal there is necessary the driving, impelling, or persuading influence of the presence or personality of the Visitor ; and hence it so happens that one Health Visitor may labour in the vineyard and achieve but little, whereas the labours of another Visitor may bear a rich harvest of good work.

Administration of Midwives Act, 1902.

The Local Supervising Authority under this Act for the Borough is the Town Council, and the work is carried out by the Health Visitors who act under the supervision of the Medical Officer of Health.

The number of Midwives who gave notice of intention to practice in accordance with the Act during the year 1913 was 53. At the time of writing there were 52 names on the register.

It was necessary during the year to either caution or suspend 6 Midwives for reasons set out below :—

	No. of Midwives affected	Action Taken
Attending patients suffering from Puerperal Fever.	5	Suspended from practice until bag, appliances and clothing were disinfected ; and instructions given to the Midwife regarding disinfection of herself.
Neglecting Patients.	1	Midwife was called before the Midwives Committee and reprimanded.

In reviewing the work and practice of the Midwives during the past year, indications are not wanting that many of the Midwives in this area are adopting a higher standard of cleanliness both as regards their own persons and practice, and greater attention is given to the cleansing of the hands and appliances. Case-books and bags have been on the whole better kept, and the Rules and Regulations of the Central Midwives Board have received more respect than in previous years. This sensible improvement may have been to some extent stimulated by the advent of the Insurance Act, which provides Maternity Benefits for all insured women workers. This allows the Midwife to receive a higher fee than formerly, and consequently according to our observations, patients expect more attention than formerly. Still it is possible that this desirable improvement is in some degree due to the initiative of the Midwife herself, in so far as she may now recognise the great responsibilities involved as to the manner in which she conducts her practice. On the other hand we have in our midst some of the older bona-fide Midwives, whose education has been such as they are unable to understand the Rules and Regulations laid down for their guidance. Some of these do their best to comply and carry out the rules of practice, but have to depend on considerable help and supervision from the Inspector. Then there are the yearly diminishing number of Midwives to whom age, education and experience have not been sufficient to impress the great responsibilities of the work in which they are engaged, and it has frequently been brought under my notice the rough treatment some patients will submit to time after time from such women rather than have a properly trained Midwife in attendance.

The operation of the Midwives Act of 1902 has undoubtedly been to slowly eliminate the more unfit type of Midwife and to produce a Midwife of higher training and efficiency. Still, having due regard to the responsibilities of midwifery practice, and that any neglect, ignorance or mismanagement in actual practice may end in life—long trouble and disability to many hard-working women, and further to the important fact that the practice of midwifery in England is largely in the hands of Midwives—in this Borough nearly 80 per cent., it should be the aim of all Sanitary Authorities and the Central Board to secure that the education and training of the future Midwife shall be consistent with the importance of the work. Such an army of Midwives efficiently trained and educated in the hygiene of pregnancy and the ordinary ailments or diseases of women and children, and especially as regards the care, feeding and nursing of infants, should prove a powerful auxiliary force, not only in preventing many of the accidents and disasters of child-birth, but in educating mothers as regards proper methods of nursing and feeding of their infants, and to point out the evils of so many erroneous practices which still exist and which tends to maintain our still too high infantile mortality. For surely it must be clearly recognised that the efficient and effective working of the Notification of Births Act of 1907, and the proper training and regulation of Midwives under the Midwives Act of 1902 are inseparately associated with the whole question of infantile mortality.

Notifications.

The following is a summary of the notifications which have been received at this office from Midwives, in accordance with Rule 21 of the Central Midwives Board :—

(a) Notifications of sending for Medical help :—**MOTHER—**

Delayed Labour	...	...	...	...	...	66
Obstructed and Difficult Labour	...	...	...	...	...	96
Ruptured Perineum	...	...	...	...	...	44
Retained Placenta	...	...	...	...	...	6
Placenta Previa	...	...	...	...	...	1
Weakness and unsatisfactory condition of Mother	...	...	...	...	...	14
Kidney Troubles	...	...	...	...	...	7
High Temperature	...	...	...	...	...	4
Hæmorrhage, Anti-partum	...	...	...	...	...	7
Hæmorrhage, Post-partum	...	...	...	...	...	6
Hæmorrhage, Accidental and Threatened	...	...	...	...	...	4
Uterine Inertia	...	...	...	...	...	3
Miscarriage	...	...	...	...	...	1
Rigid Cervix and Perineum	...	...	...	...	...	17
Malpresentations	...	...	...	...	...	27
Premature Labours	...	...	...	...	...	7
Illness, during pregnancy	...	...	...	...	...	1
Complications, before and after labour	...	...	...	...	...	8
						<hr/> 319

BABY—

General Weakness	...	...	...	...	...	6
Weakness, Premature Birth	...	...	...	...	...	21
Jaundice	...	...	...	...	...	2
Malformation	...	...	...	...	...	2
Hæmorrhage from cord and mouth	...	...	...	...	...	2
Ophthalmia	...	...	...	...	...	8
						<hr/> 41

(b) Notifications of Still-births	...	...	...	...	...	5
Laying out the Dead	...	...	...	...	...	4

Still-Births.

Under the provisions of the Notification of Births Act, 111 Still-births have been notified during the year. The greater number were notified by the Midwives, but all cases were visited.

Of the 111 cases of Still-births 69 were male births and 42 female births :—

In 28 cases a medical man was in attendance.

In 29 cases a midwife was in attendance.

In 54 cases a midwife was in attendance and a medical man called in later.

As far as could be ascertained the causes of the Still-births are given in the following table, and also the Wards in which they occurred :—

Premature Labour	...	...	...	...	...	20
Illness of Mother during Pregnancy	...	...	...	...	...	12
Malpresentation	...	...	...	...	...	17
Difficult Labour	...	...	...	...	...	22
Deformed Pelvis	...	...	...	...	...	4
Placenta Pravaria	...	...	...	...	...	2
Eclampsia	...	...	...	...	...	3
Syphilis	...	...	...	...	...	2
Shock to Mother	...	...	...	...	...	7
Strangulated	...	...	...	...	...	6
Dead some time before birth	...	...	...	...	...	7
Not ascertained	...	...	...	...	...	9
						<hr/> 111

WARD.					
Castleton North Ward ...	...	...	...	...	5
Castleton South Ward ...	...	...	...	...	14
Castleton East Ward ...	...	...	...	...	14
Castleton West Ward ...	...	...	...	...	15
Castleton Moor Ward ...	...	...	...	...	11
Spotland East Ward ...	...	...	...	...	9
Spotland West Ward ...	...	...	...	...	13
Wardleworth East Ward ...	...	...	...	...	8
Wardleworth West Ward ...	...	...	...	...	8
Wardleworth South Ward ...	...	...	...	...	6
Wuerdle Ward ...	...	...	...	...	8
					<hr/> 111 <hr/>

In 32 cases the mother was a *primi para*, and in 38 cases the mother had been engaged in work outside the home during the greater part of pregnancy.

However, it has to be noted that the nomenclature and treatment of Still-births are still very unsatisfactory from the standpoint of public health and preventive medicine. There is here an interesting field presenting many questions of vital and statistical importance which require close and careful investigation.

During the past few years we have endeavoured to discover some correlation or causal relationship between the occurrence of Still-births and the life history and environmental conditions of the mother. But it appears to me that before any such statistics can be considered reliable it will be necessary to define more clearly such terms as Still-births, Live-births, Dead-births, etc., and be more precise in their application. Such adequate definition and precision in use will no doubt be determined in the Bill which is under consideration for dealing with the Notification or Registration of Still-births, which is so desirable in the interests of the mother and of preventive medicine. Two classes of cases have to be distinguished—those cases in which the child was dead before birth; and the cases in which the child died during the process of labour; and the causes of death in each case as far as can be reasonably ascertained.

Ophthalmia Neonatorum.

In previous reports we have urged the importance of the early notification of this disease to health authorities. For it is to be recognised from available evidence that frequently as many as 20 to 30 per cent. of the inmates of institutions for the blind have suffered from this disease, and that many cases of total blindness are due to this cause alone. This is the more regrettable inasmuch as this disease, when discovered early, is very amenable to treatment. It usually appears during the first three days of life, very often on the third day, and if treated at once complete recovery usually follows. Hence, it is in accordance with the attributes of preventive medicine that this wastage of so many human lives by such disabilities should be prevented, and in February of this year 1914 the Local Government Board issued the Public Health (Ophthalmia Neonatorum) Regulations, which came into operation on the 1st day of April, 1914. By this Order this disease becomes compulsorily notifiable throughout England and Wales.

During the past year 1913 only 8 cases of this disease have been notified by Midwives as against 16 during the previous year. These cases were at once seen by the Lady Health Visitors, who in each case directed such measures to be taken as appeared most appropriate, and as far as possible the cases were placed in the hands of medical men.

The Notification of Births Act, 1907.

The early adoption of this Act in 1908 by the Health Committee of this Borough showed a wise and progressive policy, and one which secured at once the very important provisions of this Act in dealing with questions of Public Health as affecting the infantile population. This Act, when adopted, provides for the notification of all births within 36 hours, and thus we obtain at the Health Office early information of all births. The birth notification cards thus received are considered each morning by the Health Visitors, who then arrange their daily visits so as to include an immediate visit to all cases of births where from previous knowledge or experience

of the district they consider an early visit to be desirable or it may be necessary. The value of these early visits may be estimated when one contemplates on the sad fact that of the 205 deaths of infants during 1913 no fewer than 51 died within the first week of life, and no fewer than 92 within the first month of life; and thus the first month, the first week, the first day, even the first few hours of life is a critical period in the life history of the infant. Hence, in many such cases, it must appear evident, if the presence and help of the Health Visitor is to be of any avail it should be made as early as possible. During the past year (1913) 1,962 notifications were received under this Act, and these are tabulated in the following table in comparison with the previous year.

	1913		1912	
	No. of Births	Per-centage	No. of Births	Per-centage
Births Notified by Midwives	1,714	87.4	1,584	84.2
" " Medical Men	190	9.7	233	12.4
" " Parents	58	2.9	65	3.4
TOTAL	1,962	100.0	1,882	100.0
Births not Notified	53		64	

Of the 53 births not notified 20 occurred in public institutions (19 Workhouse, 1 Infirmary). The number of Still-births notified under this Act, and included above, was 106.

MUNICIPAL BACTERIOLOGICAL LABORATORY.

Number of Specimens examined during 1908-1913.

	SUSPECTED DISEASE.																			
YEAR	Diphtheria				Enteric Fever -				Tuberculosis				Other Diseases				TOTALS			
	Positive	Negative	Doubtful	Total	Positive	Negative	Doubtful	Total	Positive	Negative	Doubtful	Total	Positive	Negative	Doubtful	Total	Positive	Negative	Doubtful	Totals
1908	2	10	...	12	8	9	1	18	9	16	...	25	...	2	1	3	19	37	2	58
1909	15	41	3	59	4	10	...	14	5	29	...	34	1	2	...	3	25	82	3	110
1910	3	26	...	29	6	14	...	20	18	34	...	52	1	...	5	6	28	74	5	107
1911	25	30	3	58	2	13	1	16	33	83	...	116	94	26	10	130	154	152	14	320
1912	45	47	11	103	9	19	...	28	62	115	...	177	193	60	15	268*	309	241	26	576
1913	45	74	15	134	18	14	4	36	64	194	3	261	178	62	11	251	305	344	33	682

* This total includes 256 examinations of Ringworm hair.

Since this Laboratory was opened in the Town Hall in January, 1911, it has greatly increased the scope and usefulness of this department in so far as it has been possible to provide assistance in the earlier diagnosis of disease, and thereby to exercise greater control of the spread of infection. The Laboratory is available for all medical men in the district, and examinations and reports are made on all ordinary pathogenic specimens and on other specimens of a pathological or clinical character as far as the resources of the Laboratory will allow. The service to Public Health which this institution renders may be estimated when one considers that during the past year there were 682 specimens examined as against 320 in 1911, the year of opening. Much of

this increase is due to the increasing number of specimens of sputa, which was to be anticipated when the tuberculosis sections of the Insurance Act came into operation ; while the School Clinics also provide an increasing amount of work for the Laboratory.

No one can read the signs of the times without coming to the conclusion that the Municipal Public Health Laboratory must have a greater and more extended sphere of usefulness in the near future ; and that it will play a greater part than heretofore in placing much of our Public Health work on a more scientific basis. At present there is in England, both in County and Urban areas, a great deficiency of Laboratory facilities, and this is undoubtedly due to the fact that a properly equipped Laboratory, with an adequately trained and expert staff, must be an expensive institution. Still, from our own experience, when a suitable room provided with water and gas is available, it is remarkable, even by the judicious expenditure of much less than £100, what can be done in the way of providing a Laboratory quite suitable for all ordinary bacteriological work, if at the same time the Medical Officer and his staff can and care to undertake such work in the interests of Public Health. However, having regard to the present Budget proposals, which foreshadow that more money will be made available from the Treasury for the provision of Laboratory facilities, and when such grants to Health Authorities will be based on the efficiency of the Public Health service as a whole in each respective sanitary area, we may anticipate in the near future that our present arrangements for Bacteriological work and the analytical work carried on under the Food and Drugs Act may be consolidated and extended in a central well-equipped Laboratory suitable not only for Rochdale but for a wider area ; and in which also provision will be made and encouragement given for some local and much-needed research work in Public Health and preventive medicine.

WATER SUPPLIES.

The chief sources of water supply for many of the great industrial centres of Lancashire and Yorkshire is the higher moorland gathering grounds. Water from such sources has usually a very much lower bacterial content, or is more germ-free than water collected from gathering grounds under cultivation, or from streams or rivers which flow through inhabited areas. But on the other hand such waters are very liable to be much discoloured and turbid and of distinctly acid character due to peaty matter and decaying vegetation. Consequently, before such water can be considered safe for drinking or potable purposes, it must be subjected to some process of purification, the adequacy of which should in turn be tested chemically and bacteriologically. As to the best methods of purification a great deal of experimental data is now available, and it appears that very good results are obtained by a combination of the simple processes of precipitation and mechanical filtration under pressure. This is found usually quite sufficient to remove discoloration and turbidity, and to considerably reduce the bacterial content ; but it may not be sufficient to reduce the acidity of any such water so as to prevent plumbo-solvent action. Hence it is in this respect that great care has to be maintained in the chemical treatment by lime or otherwise of all moorland waters, and the efficiency of the process in operation tested regularly by chemical examination. This work is supervised by the Borough Water Engineer and the Borough Analyst, and from a review of the quarterly reports of the latter, the water as supplied for drinking and potable purposes in this Borough is maintained on the whole at a high degree of purity and of good quality.

SALE OF FOOD AND DRUGS ACTS.

220 samples of food and drugs have been taken in connection with these Acts, as against 217 in 1912.

Of these 220 samples 137 were formal and 83 informal.

The following is a list of the samples taken :—

DESCRIPTION	Number taken		Result of Analysis	
	Formally	Informally	Genuine	Adulterated
Milk	113	2	98	17
Skimmed Milk	9	...	8	1
Butter	3	18	21	...
Margarine .....	...	2	2	...
Lard .....	...	10	10	...
Dripping (Beef) .....	...	1	1	...
Cheese (Cheshire) .....	...	2	2	...
Demarara Sugar .....	...	1	1	...
Coffee	2	2	4	...
Arrowroot .....	...	2	2	...
Pepper .....	...	4	4	...
Ground Ginger .....	...	2	2	...
Vinegar	2	...	2	...
Honey .....	...	1	1	...
Cream of Tartar .....	...	1	1	...
Whiskey (Scotch)	3	...	3	...
„ (Irish)	3	...	3	...
Rum	2	...	2	...
Soda Water .....	...	12	12	...
Liquorice Powder .....	...	1	1	...
Flowers of Sulphur.....	...	1	1	...
Cod Liver Oil .....	...	2	2	...
Ammoniated Quinine ...	...	3	3	...
Ext. Cascara Sagrada ...	...	3	3	...
Camphorated Oil .....	...	5	5	...
Castor Oil .....	...	5	5	...
Sweet Spirit of Nitre ...	...	3	3	...
TOTALS	137	83	202	18
	220		220	

The full analysis of the milk samples in connection with which proceedings were taken is given in the following table :—

No.	PERCENTAGE OF			Extent of Adulteration
	Fatty Solids	Non-fatty Solids	Water	
683	3·13	7·61	89·26	10·4 per cent. of extraneous water
684	3·12	7·29	89·59	14·1 „ „ „
696	2·84	7·24	89·92	14·8 „ „ „
707	2·55	7·11	90·34	16·3 „ „ „
708	2·54	8·84	88·62	15·3 per cent. deficiency in fat.
731	2·64	7·33	90·03	13·7 per cent. of extraneous water
732	2·92	6·98	90·10	18·0 „ „ „
734	2·82	7·28	89·90	14·3 „ „ „
736	3·04	8·10	88·86	4·7 „ „ „
739	3·25	7·81	88·94	8·1 „ „ „
760	3·15	7·54	89·31	11·2 „ „ „
766	2·82	8·02	89·16	5·6 „ „ „
3	2·98	7·93	89·09	6·7 „ „ „
17	3·03	7·18	89·79	15·5 „ „ „
38	2·69	6·38	90·93	24·9 „ „ „
52	2·74	6·53	90·73	23·1 „ „ „

Of the 18 samples of milk reported as adulterated two were taken informally. One of these informal samples was taken in connection with a case of refusal to sell to an Inspector, and the other was followed up by a formal sample (No. 760), in regard to which a prosecution was successfully undertaken. With regard to the other 16 samples legal proceedings were instituted. Particulars of the cases are given in the following table, along with notes of two other offences under the Acts :—

No.	Date of Hearing	OFFENCE	RESULT
683	1913 Jan. 31	Selling milk with 10·4% of added water	Fined £5 and costs.
684	Mar. 7	Selling milk with 14·1% of added water	Fined £2 and costs.
696	Do.	Selling skimmed milk with 14·8% of added water	Fined £2 and costs.
—	Mar. 25	Refusing to sell milk to Inspector ...	Fined 10/6 and costs.
707	Apl. 2	Selling milk with 16·3% of added water	Fined £2 and costs.
708	Mar. 28	Selling milk deficient in fat to extent of 15·3%	Fined £3 and costs.
731	May 21	Selling milk with 13·7% of added water	Withdrawn on payment of costs.
732	Do.	Selling milk with 18·0% of added water	Ditto
734	Do.	Selling milk with 14·3% of added water	Dismissed.
736	May 28	Selling milk with 4·7% of added water	Withdrawn.
739	Do.	Selling milk with 8·1% of added water	Fined £5 and costs.
—	Do.	Refusing to sell milk to Inspector ...	Fined £2 and costs.
760	July 9	Selling milk with 11·2% of added water	Fined £2 and costs.
766	Do.	Selling milk with 5·6% of added water	Dismissed.
3	Sep. 24	Selling milk with 6·7% of added water	Fined £5 and costs.
17	Do.	Selling milk with 15·5% of added water	Fined 10/- and costs.
38	Oct. 22	Selling milk with 24·9% of added water	Fined £5 and costs.
52	Nov. 19	Selling milk with 23·1% of added water	Fined £5 and costs.

The samples Nos. 731, 732 and 734 were connected as follows :—No. 731 was purchased in the street from a Milk Vendor who stated that he had himself purchased the milk from a certain shop ; No. 732 was a sample from the shop in question, and No. 734 from the farmer supplying the milk to the shop. The last sample was taken “ in course of delivery,” but the summons was dismissed on the ground that the Magistrates held the delivery to have been completed before the sample was taken. The two dependent summonses were withdrawn on payment of costs. Sample No. 3 was a subsequent adulterated sample from the farmer concerned in the above cases, the proceedings in this case being successful.

The summons in respect of sample No. 736 was withdrawn on account of the bursting of the bottle retained by the department.

Sample No. 766 was taken “ in course of delivery,” and the summons in respect to it was dismissed by the Magistrates on account of the lack of sufficient evidence as to “ contract.”

In reviewing the year's work of the administration of the Food and Drugs Act, it is very gratifying to find that the penalties imposed on persons convicted of adulteration of milk are more substantial than usual. This is a species of fraud that can be made very profitable, and the fines imposed may only bear a small ratio to the dishonest profits obtained. The following is an example of a concrete case :—In August, 1912, January, 1913, and May, 1913, a farmer was fined once for refusal to sell to an Inspector and twice for adulterated milk. The total fines imposed amounted only to £8 10s. 0d. Then if we assume that this farmer systematically defrauded his customers during the period of ten months when the fines were exacted, and that such farmer possessed about 20 cows, each yielding on an average from 10 to 12 quarts per day ; and further, if we calculated on the basis of the lowest adulteration with which such farmer was charged—6·8 per cent. of added water, then follows the interesting but simple question, how many gallons of water were added during those ten months and what was the amount of profit got by selling such water at 3½d. per quart. I venture to think the answer will still make one seriously inclined to ask the further question, does the penalty fit the crime in those cases of persistent and systematic adulteration ? Does it not appear evident that if the penalty was made to fit the crime, and such that it rendered milk adulteration an unprofitable business, then those engaged in this form of fraud would find it more profitable to pursue an honest business. It is often very regrettable that the more straightforward and unsophisticated of milk adulterators who may only occasionally descend to this form of fraud usually suffer the heavier penalties ; whereas the adulterator, who appears to have studied every device to make the procedure of sampling in his case more difficult and involved than usual, and thereby to cloud the issue as much as possible with all forms of technicalities, appears not unfrequently to have his hopes gratified inasmuch that in the cloud of confusion of irrelevant matter he sometimes partly escapes from justice, although he is by far the worst type of offender and deserving far more severe punishment than his more unsophisticated neighbour.

Milk Standard.

Frequently during the past year when cases were being heard before the Local Bench, it has been brought forward on behalf of the defendant as a plea of extenuation or doubt or possibility that the milk direct from the cow may fall below the standard laid down by the Board of Agriculture. This is quite good as a form of argument, but everyone knows who knows anything at all about dairy cows, that an average sample taken from the mixed milk of a herd of cows is always far above the standard. Indeed the standard is a very low one, and entirely in the favour of the dairy farmer ; although there are conditions when a single cow through illness or bad feeding or some other abnormal conditions may give milk for a time which, when taken by itself may fall below the standard. But the milk of such a cow will not be detected in the mixed milk of a herd of cows. The usual experience in milk sampling in this Borough is that if the dairyman is allowed to select the can on his milk cart from which he supplies the milk to the Inspector, such milk is usually well above the standard.

Labelling of Milk Vessels.

One farmer, after suffering a conviction for the sale of adulterated milk, in July, 1910, adopted this method, and affixed a label in the following terms :—“ Under the Food and Drugs Act, 1893, all milk sold from these cans is more or less diluted and is sold as such. No standard is guaranteed.” Although the farmer who first adopted this device saw fit to discontinue it, several other farmers adopted the practice, and during the year under review it has been continued by a few. This new phase of procedure to defeat the working of the Food and Drugs Act called for immediate consideration, and the following report was presented to the Health Committee by the Chief Sanitary Inspector :—

“ I beg to report that the following milk vendors have at some period or other during the last month had labels on their milk kits, and also on their delivery cans.

“ (A) There were four persons who had a large label on their kits and cans which read as follows :—

“ ‘ Under the Sale of Food and Drugs Act, 1893, all milk sold from these cans is
‘ more or less diluted and is sold as such. No standard is guaranteed.’ ”

“ One of these persons has the label fixed by a slot arrangement so that it could be placed on the kits or cans or removed, as the occasion demanded ; while the others have the labels on the large kit placed in such a manner as not to be observed by the public unless a close examination of the kit is made.

“ (B) One person has his delivery cans labelled ‘ mixed.’ In this case the vendor stated that he was selling according to label, or mixed.

“ (C) Two other persons, although they had not labels on their kits or cans, when asked by the Inspector for milk, declared it to be milk and water.”

The names were given in this report.

The farms implicated under (A) were Newbold Farm, Rochdale ; Great Howarth Farm, Wardle ; Brown Lodge Farm, Smithy Bridge ; and Lenny Barn Farm, Rochdale.

The farm implicated under (B) was Cronshaw Farm, Milnrow.

The farms implicated under (C) were Pitts Farm, Rochdale ; and Ryecroft Farm, Heywood.

The Health Committee, after due consideration, resolved to report this new procedure to the Local Government Board and the Board of Agriculture, and to issue large posters warning householders against purchasing milk from milk vendors whose cans were labelled. The posters were largely exhibited throughout the Borough and read as follows :—

BOROUGH OF ROCHDALE.

PURE MILK SUPPLY.

PUBLIC WARNING.

NOTICE IS HEREBY GIVEN that it has come to the knowledge of the Council that several Cowkeepers or Milk Purveyors have adopted the practice of affixing to the cans from which milk is supplied to their customers a label on which there appears a notice having for its object the protection of the seller from legal proceedings in the event of the milk being found to be below the standard required by law.

The Council are satisfied that this practice has not the support of the Trade generally, and they appeal to the inhabitants of the Borough to assist in maintaining a Pure Milk Supply by refusing to purchase milk drawn or delivered from a can labelled in the manner indicated.

The practice is now, as far as I have evidence, almost discontinued, and in this respect the local Farmers' Association deserves considerable credit in denouncing the practice, and repudiating the action of some of its members involved in this ingenious and novel form of fraud.

Milk and Dairies Bill.

In 1909, the first report I issued in this Borough, was an Investigation as to the Conditions of the Cowsheds, Dairies and Milk Supply. In that report I gave evidence of the truth of what has been often repeated that milk is probably the most useful and most widely used of all food-stuffs, and yet it is the dirtiest. I further produced evidence to show that milk may become a very important vehicle or medium for carrying infection, and especially of the great risks of Tubercular infection being carried by the milk of the cow to babies fed on cows' milk ; and amongst other things, the susceptibility of milk to all forms of adulteration.

The above Bill then, which at the time of writing is before Parliament, and long overdue, endeavours in the first place by a process of negotiation and compromise between those chiefly affected by its provisions, to remove those objections which have been urged against and wrecked its predecessors ; and thereby, to place such further powers in the hands of local Health Authorities as will enable them by a thoroughly reasonable procedure to deal more effectively with the above enumerated conditions, and many other defects and abuses which have been rampant and flourished under all previous legislation. The progress of this Bill, and the ultimate form in which it reaches the Statute Book will be followed with great interest by all those who have long recognised the paramount importance of a reasonably pure, unadulterated and tubercular-free milk supply.

MILK AND CREAM REGULATIONS.

The following is a copy of the Report of Administration in connection with the Public Health (Milk and Cream) Regulations, 1912, for the year ending 31st December, 1913, and forwarded to the Local Government Board, January, 1914 :—

I.—MILK AND CREAM NOT SOLD AS PRESERVED CREAM.

(a) MILK.—Nearly all the milk consumed in this district is produced either within the Borough boundary or in the immediately adjacent districts, and practically little or none is brought in by rail. Hence, the prevailing practice is that, as soon as the cows are milked, the milk is despatched in kits at once in milk floats and sold by the dairymen to their respective customers. 124 samples of this milk have been analysed during 1913, and the Borough Analyst reports that, while making analysis of the milk for other constituents, he frequently, not only during the present year, but in previous years, tested the milk for preservatives, but always failed to find any trace of these.

(b) CREAM.—So far as we are aware, at present only a few dairy farmers in this district sell fresh cream ; and two of these are dairy farmers who have recently erected model dairy premises and carry on their business under our direct supervision. Their milk and cream is in normal circumstances and always when tested above suspicion.

II.—CREAM SOLD AS PRESERVED CREAM.

It may be stated at once that very little cream of any kind appears to be sold or used in this Borough. According to a recent investigation there are only about 12 retail shops in town that supply bottled preserved cream. These shops are all supplied by cream from three firms of good repute, whose bottles of cream are in each case labelled as containing Boric Acid as a preservative, but not exceeding 0.5 per cent. The firms are :—Hailwood's Creamery, Broughton, Manchester ; Cumberland Dairy Co., Low Row, near Carlisle ; Horner's Creamery, Cuddington, Cheshire.

I.—CONCLUSION.

Milk and Cream not sold as preserved cream nearly all produced locally and sold at once. Preservatives not required and none found by the Borough Analyst.

II.—CREAM SOLD AS PRESERVED CREAM.

Quantities sold here small, and by reputed firms, whose cream is continually being subjected to analysis in different districts, and so far as we have made observations such cream has been generally satisfactory, but arrangements have been made for actual analysis to be made from time to time.

Since writing this report several analyses of Cream sold in the Borough have been made, and in two cases the Regulations were not complied with as regards labelling of bottles. The vendor was cautioned by letter.

COWSHEDS AND DAIRIES.

The registration of the Dairy Farmers in this district still remains unsatisfactory and always incomplete ; and it is evident that further steps other than warning would require to be adopted. However, in the immediate future, we may expect that some of the provisions contained in the Milk and Dairies Bill will materially assist in placing the trade of the Dairyman in a very much more satisfactory condition than heretofore. This will be good for the Dairyman no less than for his customers. The number of visits made to Dairy Farms during the year was 298, and the chief structural defects found, with the remedial measures adopted, are set out in the following Table :—

Defects.	Work accomplished.
(a) Defective Stalls	In every case new floors to stalls were provided.
(b) Defective Middensteads	New middensteads provided in suitable positions or defects remedied.
(c) Defective Piggeries	New piggeries provided in suitable positions or defects remedied.
(d) Defective Floors of Shippons	Such floors made good or relaid.
(e) Defective Drainage of Shippons	In several cases a new drainage system was put in or drains improved, and where necessary adequate cesspool accommodation provided.

In 3 cases the cows in shippon were found in a dirty condition.

In 29 cases shippons were found dirty and required to be thoroughly cleansed and limewashed.

One middenstead abutting against the walls of the shippon was discontinued.

In reviewing the work of Inspection of Cowsheds and Dairies for the year there are not wanting many indications of marked general improvement. The shippons and cows are kept more cleanly than formerly, and more attention on the whole is given to the provision of adequate ventilation, although the cleanliness of the milkers leaves much to be desired in many cases. Still, as regards lighting and ventilation, many of the farmers in this district hold very erroneous and conservative ideas. Many are not readily convinced when told that if cows were kept out in the open air nearly all the year round there would be very few tubercular cows to give tubercular milk to infect babies with bovine tuberculosis; nor can they believe that the Jersey cow, which is supposed to be a delicate animal, when supplied with plenty of good food, can live and thrive and give her best supply of milk when kept outside in climates colder than Lancashire. Although such facts may be reiterated from time to time, still the traditional conservatism, or it may be, wilful or convenient ignorance in some cases, asserts itself, and the old tale is always repeated, that any one who desires cows to be housed in well-lighted and well-ventilated shippons has no practical knowledge nor experience of farming; and that their own methods as handed down from their fore-fathers before them cannot be improved. Much is being done at present to endeavour to dispel these erroneous ideas; for before any real progress can be made, it will be necessary to banish superstition and ignorance, and get Dairy Farmers to understand that farming and the production of milk is a very scientific business, and one which requires considerable study; and it is only when farmers begin to study the natural history of the cow that they will appreciate the value and necessity of light and ventilation and plenty of open-air for the cow. It is then they will understand the reasons why the ill-lighted, ill-ventilated and overheated cowshed of the past has been, and is at present, the chief cause of much of the illness and disease, especially tubercular disease, which exists amongst the dairy herds of England, and the cause of the eternal cold to which the cow is so susceptible in winter, and on account of which the farmer excuses the necessity of even keeping all holes, doors and windows sealed up. He would learn that all these troubles are due to a perversion of the natural and normal life conditions of the poor but useful domestic cow.

It must be noted, however, that many of the shippons in this district are so old and dilapidated and the structural arrangements so bad that it is extremely difficult in many cases for the dairymen, even when so disposed, to carry on his business in a reasonably cleanly and satisfactory manner. The truth of this will be evident to any one who consults the exhaustive report prepared in 1909 by this department. During the present summer we are endeavouring to get some of the landlords to carry out extensive improvements at some of the worst shippons.

Table showing number of Carcases or Parts of Carcases and other Foodstuffs which have been seized or surrendered as unfit for human food.

[illegible]

The carcasses of 96 animals showed evidence of being affected with Tuberculosis ; and according to the Table opposite in twelve cases the whole carcass was seized or surrendered, while in 84 cases either the portions of carcasses or organs affected were either seized or surrendered.

The total number of carcasses or organs of carcasses showing evidence of disease other than Tubercular in a greater or lesser degree were 259 or 2.03 per cent.

Humane Killing of Animals.

In view of new Bye-laws for the control of the Slaughter-houses of this Borough, which Bye-laws are at present before the Local Government Board, there has been considerable discussion regarding the most humane way of slaughtering animals, and a deputation was received by the Health Committee, both from the Association of Butchers and from the Society for the Prevention of Cruelty to Animals. Opinion on this question is by no means unanimous. But there are many other aspects of this question which equally deserve consideration, and probably not the least is the transit of animals. The Meat Inspector reports that one of the most noticeable features in reviewing the year's work on Meat Inspection is the number and extent of injuries suffered by animals during transit. That bad-usage of a greater or lesser degree not infrequently commences as soon as the animals leave the premises of the farmer, and is continued until they reach the slaughter-house. They are not only beaten by attendants at Cattle Markets, etc., but the accommodation provided during railway transit is often very inadequate. Hence it is not uncommon on unloading cattle trains to find animals with broken legs, or to find on the floor of the truck, the bodies of those that have been trampled to death by their neighbours, or one may find some of the animals suffocated or in a state of suffocation. Such treatment is extremely repulsive from a humane point of view, and the more so, as it is largely preventable. For if it is considered necessary that for man's physiological needs and comfort he should have animal foodstuffs, then the very least that might be expected of him is to ensure, as far as possible and reasonable, that those animals which provide so much for his comfort shall be treated humanely while alive, and killed with the least possible infliction of pain. That cruelty to animals does exist apart from the slaughter of animals altogether, let any one walk along the street or country road and consider the life of that most noble, useful and willing animal the horse, and then weigh against the pain of slaughter, the untold pain from which many animals must suffer during life and to which no articulate voice gives utterance. I have every confidence that those engaged in the meat trade in this Borough will always be willing to adopt any approved method which, other things being equal, can be shown to secure the more humane slaughter of animals.

The Preparation of Bye-Products in the Meat Industry.

These bye-products usually consist of pork pies, brawn polonies, savoury ducks, sausages, and cooked meats ; and are prepared chiefly in connection with the pork trade. It is regrettable, however, to find that in the majority of cases such food materials are prepared in the actual slaughter chambers ; and on inspection one not infrequently finds the process of food preparation and the slaughter of animals carried on simultaneously. Under such conditions the dangers of contamination are very great. In three cases the making up of such foodstuffs is carried on in cellars underneath the shops. These places are kept fairly clean, but as they are ventilated near the street level there is again much risk of contamination from dust and dirt from the street. With regard to potted meat, there are only two premises in Rochdale where this business is carried on to any great extent ; it is chiefly prepared and sold by the smaller shopkeepers and confectioners.

Fried Fish Shops.

In recent years the fried fish industry appears to have extended considerably. This may be partly due to judicious advertising by the fish trades by means of which the public have become educated as to the value of fish as a foodstuff.

In many of these shops the business is conducted in a satisfactory manner. Good frying stoves or cookers have been provided, the shops are kept clean and smells avoided as far as possible. In other cases the conditions are not satisfactory, and these have been receiving considerable attention during the past year.

No. of Visits to Fish Shops	...	...	...	...	103
No. found to be kept in a cleanly condition	...	...	...	...	27
No. found to be kept in a fairly cleanly condition	...	...	...	...	25
No. found to be kept in a dirty condition	...	...	...	...	7

Occupiers of fried fish shops using tripe dripping for either frying fish or chips...	32
Occupiers of fried fish shops using beef dripping for either frying either fish or chips	5
Occupiers of fried fish shops using cotton seed oil for either frying fish or chips...	21
Occupiers of fried fish shops using American lard for either frying fish or chips...	13
Occupiers of fried fish shops using composition lard for either frying fish or chips	3
Occupiers of fried fish shops using own rendered fat for either frying fish or chips	3

OFFENSIVE TRADES.

The premises at which offensive trades are carried on in this Borough are as follows :—

Tripe Boiling	...	...	...	...	...	...	...	...	4
Gut Scraping	...	...	...	...	...	...	...	...	2
Fellmongers	...	...	...	...	...	...	...	...	3
Tallow Melter	...	...	...	...	...	...	...	...	1
Knacker's Yard	...	...	...	...	...	...	...	...	1

Number of visits to premises during the year ending 1913 :—120.

Defects found on Visits.

Defects.	Work accomplished.
(a) An offensive middenstead and defective wooden pail closet adjoining weighing room	New middenstead provided, water-closet provided in an approved situation.
(b) Defective floor and drainage	Floor raised and redrained.
(c) Two premises in dirty condition	The premises were thoroughly linewashed and cleansed.

BLACK SMOKE ABATEMENT.

The recorded observations during 1913 number 339, or 145 more than during 1912, when for three months no observations were taken owing to the coal strike. Compared with 1911, the recorded number of observations show an increase of 44. The observations taken were for a period of one half-hour each, and were confined to 71 of the chimneys belonging to the working manufactories of the town. Of these 71 chimneys 18 were kept more regularly under observation than the rest on account of the frequent emission of black smoke ; the number of observations on these 18 chimneys was 205, and varied from 23 to 6 for each chimney.

The total number of minutes during which black smoke was found to issue from the 71 chimneys was 414, an average of 1.2 minutes for each observation, as against an average of 1.6 minutes per observation during 1912. The time limits fixed by the Committee were exceeded on 28 occasions, or once for every 12 observations taken, as against once for every 9 observations taken during 1912, and resulted in notices being served or proceedings being instituted. The time limits for one half-hour's observation are :—

- 1.—Chimneys with one, two or three boilers working—3 minutes.
- 2.—Chimneys with four or more boilers working—4 minutes.

In the case of chimneys having one, two or three boilers working the limit was exceeded 22 times, as against 21 times in 1912 ; and of chimneys having four or more boilers working the limit was exceeded 6 times, against once in 1912.

The following table gives particulars of the issue of black smoke from these chimneys :—

Issue of Dense Black Smoke on 28 occasions when time limits were exceeded.

	No. of Observations	Total Issue in Minutes	Average No. of Minutes per Observation	Average No. of Minutes per Boiler	Number of Cases in which Smoke-Preventing Appliances were—		
					In Use.	Partly in use	Not in Use.
1, 2 or 3 Boilers Working }	22	117	5.3	2.5	6	2	14
4 or more Boilers Working }	6	45	7.5	1.4	4	2	...
Both cases combined	28	162	5.8	2.1	10	4	14

In nine cases, against seven in 1912, legal proceedings were instituted with the results shown below :—

Legal Proceedings for Abatement of Black Smoke Nuisance.

No. of Firm on Register	Date of Hearing	OFFENCE	RESULT
11	Jan. 3	Failing to comply with an order made 28/9/10	Fined 10/- and costs.
120	May 2	Emitting 3½ minutes of black smoke in half-hour (one boiler)	Order for abatement within 28 days and pay costs.
119	July 11	Emitting 9½ minutes of black smoke in half-hour (four boilers)	Order for abatement within 28 days and pay costs.
60	Sept. 5	Failing to comply with an order made 8/4/09	Fined 10/- and costs.
119	Oct. 4	Failing to comply with an order made 11/7/13	Fined 10/- and costs.
33	Dec. 3	Failing to comply with an order made 4/11/08	Fined 10/- and costs.
33	Dec. 17	Do. do.	Fined 10/- and costs.
11	Dec. 17	Failing to comply with an order made 28/9/10	Fined 10/- and costs.
117	Dec. 31	Failing to comply with an order made 28/11/10	Fined 10/- and costs.

Several alterations and additions to apparatus have resulted from these prosecutions ; in the case of No. 120 in the above table new smoke-consuming apparatus has been installed ; in the case of No. 117 one new additional boiler and new economisers have been fixed, the engines overhauled and the chimney raised seven yards. A new chimney has been built in consequence of the prosecution of one firm in 1912 ; and a chimney raised by another firm prosecuted in the same year.

The question of the reasonable abatement of the black smoke nuisance has been discussed from many platforms in recent years, and all sorts of reasonable and unreasonable propositions have been put forward. But more important by far is the fact that the owners of mills and factories, as well as many leading municipalities, are recognising the truth of what has been repeatedly stated in previous reports, that this is a scientific problem, which can never satisfactorily be solved by the work of the Smoke Inspector. To-day we all recognise that the prevention of the pollution of the atmosphere by black smoke or any other kind of smoke, is a question closely akin with the pollution of the atmosphere in former times by many other forms of fumes, which were found to be inimical to health and vegetation ; but by the processes of scientific application, these very supposed waste and noxious fumes have in many cases been so utilised in the manufacture of bye-products as to become in some cases a considerable source of revenue. The smoke problem will be solved in a similar manner, when first we recognise that sunlight is life and the great source of all energy ; whereas smoke is not only inimical to health and vegetation, but destructive to everything it comes in contact with, and is a wasteful product of coal combustion, for which science and the experimental method must find a better use. It is thus often far more effective in the path of progress, if an offender can be persuaded, that to adopt a certain course will not only be desirable, but that it will be more economical for himself to do so. In this respect one cannot but recognise the leading part taken by the Corporation of Manchester, who have recently appointed a strong scientific Committee to go into the whole question of plant for steam power and smoke production ; and further in this report we must note the enlightened and leading part played by the Member of Parliament for Rochdale, who is himself a large and local manufacturer. It may be added that the President of the Local Government Board has appointed a Commission to enquire into and to investigate the whole question of smoke production and smoke abatement. The report of this Commission will be of considerable interest.

FACTORY AND WORKSHOPS ACTS.

Retail Bakehouses.

The number of bakehouses now on the Registers is 148. Each of these has been visited and inspected at least twice—once in April, and once in October ; further visits depending on the necessities of each case. Following is a list of work done in connection with Retail Bakehouses :—

Number of Inspections of Retail Bakehouses	...	...	...	361
Cleansing and Limewashing carried out on intimation from				
Inspector	...	...	...	75
Pail Closets converted to W.C.	...	...	...	5
Wall-paper stripped off	...	...	...	1
Slopstone renewed	...	...	...	1
Floors repaired	...	...	...	2
Grease trap provided	...	...	...	1

A high standard of cleanliness has again been maintained without resort to the service of any statutory notices in respect of work to be done.

Workshops.

95 inspections of workshops (distinguished from workshop bakehouses) have been carried out during the year. The provision of suitable sanitary accommodation has received consideration contemporarily with the work of pail-closet conversion ; in every case in which a workshop or bakehouse has formed part of a block of premises where pail-closets were to be converted the closet for the workshop has also been converted or additional water-closets provided.

Another feature of workshop inspection has been the provision of hoods and flues for the proper carrying off of fumes from gas burners or heaters in milliners and other workrooms. The

general conditions existing at the workshops and workplaces are reasonably good, and no opposition to suggestions for small improvements has been experienced by the inspectors.

Following is a summary of work carried out in connection with workshops :—

No. of inspections of workshops	...	...	...	...	...	95
Workshops cleansed and limewashed	...	...	...	...	...	7
Workshops properly ventilated	...	...	...	...	...	3
Pail-closets converted	...	...	...	...	...	5
Additional water-closets provided	...	...	...	...	...	4
Closet rebuilt and converted	...	...	...	...	...	1
Closet accommodation for sexes separated	...	...	...	...	...	1
Hoods and flues for fumes provided	...	...	...	...	...	2

Factories.

30 inspections of factories have been made principally in connection with complaints received from H.M. Inspector of Factories. These complaints again referred chiefly to the want of closet doors, fasteners and screens, but have, in a large number of cases actually resulted in conversion of pail-closets to the water-carriage system, and in the provision of properly constructed drains. The construction of suitable drainage systems and provision of W.C.'s at some of the factories in the town often presents unusual difficulties, and good work has been done in overcoming these difficulties during the year 1913.

Reports of action taken in respect of the complaints have been duly forwarded to H.M. Inspector of Factories.

Homework.

4 inspections of outworkers' premises have been made during 1913. In each case the conditions and conduct were satisfactory. The work in connection with the Factory and Workshops Acts is summarised below :—

1.—INSPECTION.

Number of Inspections of Factories	...	...	...	...	...	30
„ „ Workshops and Workplaces	...	...	...	...	...	170
Total	...	...	...	...	...	200

2.—DEFECTS FOUND AND REMEDIED.

* Want of cleanliness	...	...	...	...	...	...	7
Want of ventilation	...	...	...	...	...	...	3
Overcrowding	...	...	...	...	...	...	—
Want of drainage of floors	...	...	...	...	...	...	—
Other nuisances	...	...	...	...	...	...	3
Sanitary accommodation—insufficient	...	...	...	...	...	...	4
unsuitable or defective	...	...	...	...	...	...	12
not separate for sexes	...	...	...	...	...	...	1
Total	...	...	...	...	...	...	30

3.—HOME WORK.

OUTWORKERS' LISTS (S. 107).

NATURE OF WORK.	Lists received from Employers.				No. of Addresses of Outworkers		No. of Inspections of Outworkers Premises
	Twice per year		Once per year		received from other Councils	forwarded to other Councils	
	Lists	Out- workers	Lists	Out- workers			
Making. etc., of Wearing Apparel.	2	2	2	5	...	5	4

* NOTE.—The item “ Want of cleanliness ” above does not include the cases of bakehouses which were limewashed twice during the year on intimation from the inspector, and which numbered 75.

4.—REGISTERED WORKSHOPS.

No. of Workshops on Register (S. 131) at the end of the year ... 251

5.—OTHER MATTERS.

MATTERS NOTIFIED TO H.M. INSPECTOR OF FACTORIES :—

Failure to affix abstract of Factory and Workshops Act (S. 133)	0
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts but not under the Factory Act ...	14
Notified by H.M. Inspectors	14
Reports (of action taken) sent to H.M. Inspectors	23

UNDERGROUND BAKEHOUSES (S. 101)

Certificates granted during the year ...	0
In use at end of year ...	8

NUISANCES UNDER PUBLIC HEALTH ACTS.

The work under this section connected with abatement of nuisances in and around dwellings as distinguished from the remedying of defects found in Bakehouses, Workshops, Slaughter-houses, Cowsheds, etc., and of nuisances from Black Smoke, has again been considerable. Besides the usual district inspection resulting in the abatement of a large number of nuisances 120 complaints from persons outside the department, necessitating 296 visits of inspection, have been received. In each case the defects found were remedied in the usual way. In addition to the inspection of houses and of miscellaneous inspections (numbering about 1500) the following work has been necessitated :—

Work in connection with Nuisances.

NATURE OF INSPECTIONS, ETC.	No.
Inspections of Work in progress ...	3,849
Re-inspections to ascertain if work in progress ...	523
Owners interviewed concerning nuisances ...	667
Occupiers interviewed concerning nuisances ...	109
Preliminary Notices sent out ...	206
Statutory Notices served ...	33
Drains tested (9 found defective) ...	19

The miscellaneous inspections include:—41 inspections of waste-water closets, and 42 inspections with regard to overcrowding.

Statement of the Removal of Nuisances in and around Dwellings.

NATURE OF WORK DONE	No.
HOUSES—	
Houses limewashed and cleansed ...	27
„ repaired —walls and ceilings ...	13
„ „ —floors ...	17
„ „ —roofs ...	4
„ rendered dry—walls and ceilings ...	12
Light and Ventilation improved ...	6
Water removed from cellars ...	15
Smoky chimney remedied ...	2
Nuisance from escape of Coal Gas removed...	1
Rag-sorting in dwelling house discontinued ...	9
Cases of overcrowding remedied ...	5

Statement of the Removal of Nuisances in and around Dwellings—Continued.

NATURE OF WORK DONE								No.
ACCUMULATIONS—								
Offensive Accumulations removed	...	...	...	...	...	...	...	22
Stagnant Water removed	...	...	...	...	...	...	...	1
Cellar Areas cleansed	...	...	...	...	...	...	...	4
CLOSETS—								
Midden-privies converted to water-closets and ash-bins	...	...	...	...	...	...	...	53
„ „ abolished	...	...	...	...	...	...	...	3
Pail-closets converted into water-closets (under Public Health Act)	...	...	...	...	...	...	...	15
„ repaired or altered	...	...	...	...	...	...	...	1
„ urine guides fixed	...	...	...	...	...	...	...	3
„ cleansed and limewashed	...	...	...	...	...	...	...	17
Water-closets repaired or altered	...	...	...	...	...	...	...	6
„ soil pipe repaired	...	...	...	...	...	...	...	2
„ cleansed	...	...	...	...	...	...	...	2
„ basins renewed	...	...	...	...	...	...	...	2
Waste water-closets repaired or altered	...	...	...	...	...	...	...	6
„ „ opened and cleansed	...	...	...	...	...	...	...	8
Urinal reconstructed	...	...	...	...	...	...	...	1
ASHPLACES AND ASHBINS—								
Additional ash-places or ashbins provided (Public Health Act)	...	...	...	...	...	...	...	5
Ashplace floors raised and flagged	...	...	...	...	...	...	...	2
Ashplaces repaired or reconstructed	...	...	...	...	...	...	...	22
DRAINS—								
Main drains entirely reconstructed	...	...	...	...	...	...	...	31
„ extended	...	...	...	...	...	...	...	9
„ manholes made good	...	...	...	...	...	...	...	7
Branch drains reconstructed	...	...	...	...	...	...	...	227
Drains provided with ventilating shafts	...	...	...	...	...	...	...	40
„ „ access chambers	...	...	...	...	...	...	...	79
„ repaired only	...	...	...	...	...	...	...	41
„ opened and cleansed	...	...	...	...	...	...	...	65
„ inside premises abolished	...	...	...	...	...	...	...	1
Additional drain provided	...	...	...	...	...	...	...	1
Cellar drains repaired or reconstructed	...	...	...	...	...	...	...	3
„ removed to areas	...	...	...	...	...	...	...	3
WASTE-PIPES, ETC.—								
Bath and lavatory waste-pipes repaired or disconnected from drains	...	...	...	...	...	...	...	2
Rain-water pipes repaired or renewed	...	...	...	...	...	...	...	10
„ „ disconnected from drains	...	...	...	...	...	...	...	45
Eavestroughing repaired or renewed...	...	...	...	...	...	...	...	7
Kitchen waste-pipes disconnected	...	...	...	...	...	...	...	3
„ „ trapped, lengthened or repaired	...	...	...	...	...	...	...	40
YARDS AND PASSAGES—								
Back yards paved or flagged	...	...	...	...	...	...	...	26
„ cleansed	...	...	...	...	...	...	...	2
„ surfaces repaired	...	...	...	...	...	...	...	6
„ obstructive sheds removed	...	...	...	...	...	...	...	4
Common yards flagged, paved or channelled	...	...	...	...	...	...	...	3
Covered yard thrown open	...	...	...	...	...	...	...	1
Back passages paved (20 houses)	...	...	...	...	...	...	...	2
Covered passages limewashed	...	...	...	...	...	...	...	1
ANIMALS, EFFLUVIA, ETC.—								
Removals of animals and fowls improperly kept	...	...	...	...	...	...	...	2
Trade effluvium nuisances abated	...	...	...	...	...	...	...	2
Factory chimneys raised	...	...	...	...	...	...	...	1
Manure pits repaired or reconstructed	...	...	...	...	...	...	...	2
„ cleansed	...	...	...	...	...	...	...	3
„ abolished	...	...	...	...	...	...	...	3
„ provided	...	...	...	...	...	...	...	2
„ redrained	...	...	...	...	...	...	...	1

The following schools have also been both sprayed and fumigated in consequence of the occurrence of Infectious Disease :—

P. S. School	...	...	...	...	...	...	...	7 rooms
St. A. School	...	...	...	...	...	...	...	3 „
C. School	...	...	...	...	...	...	...	20 „
St. E. S. School	...	...	...	...	...	...	...	12 „

Marland Hospital.

Very frequently during the year, as the opportunity presented itself, the different wards in the Hospital were thoroughly disinfected. This was considered necessary by reason of the large number of infectious cases which passed through the Hospital during the past year.

CANAL BOATS ACTS.

70 inspections of Canal Boats have been made during the year. All the boats were found to comply with the Regulations except one. In this case the cabin was defective and requiring painting. Notice was served and the defects were subsequently remedied.

THE CONVERSION OF SEPARATE PAIL-CLOSETS, JOINT PAIL-CLOSETS AND PRIVY MIDDENS TO THE FRESH WATER CARRIAGE SYSTEM.

This scheme, after steadily justifying the soundness of its principles and the beneficence of its purpose during the past three years, may now be considered as having passed the Scylla and Charybdis of its earlier career, and that for some years to come it will require to be kept in the forefront of our administration work.

During the year 1913 very good progress has again been made, although in many cases negotiations take up much time and many difficulties have to be overcome. But it may be readily seen from the following pages, which give particulars of the work that is passing from a long-established conservancy system to the water-carriage system, it is necessary to carry out at the same time a good deal of other work of general improvement ; and in every case it is necessary to take such measures as will ensure that the drainage system of each house is satisfactory.

In carrying out this scheme we avail ourselves of every opportunity to discuss with property owners the advisability of adopting improvement schemes which include the conversion work as a part ; and I gladly avail myself of this opportunity to express appreciations of the willing disposition shown and endeavours which many owners make to carry out our suggestions and improve their properties. The most valuable results that accrue from these suggestions are found in the entire reconstruction of drainage systems, the increase of yard space, and the abolition of and conversion of common yards to private yards where possible, and the conversion of back-to-back houses, etc. Still, on the other hand, there are owners who might be expected, both from the civic and the public health standpoint, to exhibit greater zeal in helping forward with this work ; and finally, there are the very few who have adopted a hostile and unreasonable attitude. But it should be remembered that, although a generous contribution towards cost of conversion is provided at present by this Corporation, it is not necessary that such a contribution should be provided, as all pail closets may be dealt with in this Borough just as in other places, as Nuisances under the Public Health Acts ; and that day may not be far distant.

In this respect I will here *ad verbatim* an extract from a report recently issued by the Local Government Board of England. This report has been prepared by the Chief Medical Officer of the Board, and from a critical study of all the data collected by the Officers of the Board and otherwise from the different sanitary areas of England and Wales.

“ It is an accepted fact that defective scavenging and the retention of excremental matters in privies and pail-closets are always accompanied by excessive infantile diarrhoea. For our present purpose it is unnecessary to argue the exact method of convection of infective material. But in the hot dry months of summer flies doubtless carry it to food, there must also be contamination by dust and by the direct soiling of hands and clothes. Further it must not be assumed that diarrhoea is a complete index of excessive infant mortality due to excremental pollution. The fact that the poor, on whom the conditions of life pressed heavily, have to bear the additional daily burden of close company with a stinking mass of putrefying filth, the periodical emptyings of which spread the savour

“ broadcast and poison the surface of the ground for yards around,’ implies further evil results. These are not so easy to measure as the excess of diarrhœa deaths ; though their presence can be detected. The Counties in which privies prevail under urban conditions are the black patches of the country in respect of enteric fever. This disease may attack infants as well as adults. The excessive death-rate from ‘ convulsions ’ in these counties to some extent implies poisoning of the digestive organs. It is significant also that infantile bronchitis and pneumonia are twice as fatal in the industrial counties as in the rural counties. Nor can the excessive death-rate during the first month of life in the same counties be dissociated from the likelihood that at this most sensitive age the poisoned environment supplied by the effluvia of privies and of overcrowded houses is largely concerned with the greater death-toll.

“ In the preceding sentences discussion has been concerned with the excess of infant mortality and especially of infantile diarrhœa in the industrial communities in which conservancy systems, and especially privy middens, prevail.

“ It is important to remember that in hot weather the infecting material of diarrhœa is widely scattered, and only rigid cleanliness can keep it out of infant’s food. With a conservancy system of domestic sanitation under town conditions this appears to be almost impracticable, the possibilities of massive infection being so numerous ; with a water-closet system one of the chief dangers has disappeared, but infectious material may be supplied from the dustbin or ashpit if not properly kept and emptied, from neighbouring manure heaps, from the dust blown or trodden in from imperfectly scavenged streets, or actually brought into the house on children’s hands or clothes, or by flies.

“ The responsibility for a large portion of the total infant mortality and of the mortality from infantile diarrhœa must be borne by sanitary authorities. Domestic cleanliness has not a fair chance so long as sanitary authorities permit the continuance in closely aggregated towns and in larger compact villages of privies and other arrangements for keeping excretal products near the house ; so long as they do not carry out scavenging satisfactorily ; and so long as they allow streets and yards requiring it to continue unpaved.”

The subjoined Table shows the progress of the work since 1911 :—

Progress of the work of Conversion.

Period	Number Scheduled and notice served for Conversion	Water-closets installed			Number of Pail-closets abolished	Number Work in progress or in hands of Contractor
		Pail-closets Converted	Additional Total	Total		
June to Dec., 1911 ...	618	164	21	185	2	191
Up to end 1912 ...	1,865	841	49	890	30	275
Up to end 1913 ...	3,094	1,808	101	1,909	46	441
To end June, 1914 ...	3,488	2,149	116	2,265	51	413
Work for each complete year {						
1912 ...	1,247	677	28	705	28	...
1913 ...	1,229	967	52	1,019	16	...

The above Table presents the work done as regards pail-closets during the past three years. At the end of 1911 the total number installed was 185 ; at end of 1912, 890 ; at end of 1913, 1,909 ; Thus, during the past year 1,019 water-closets have been fixed, and of this number, as seen by Table, 52 are additional or new for which no contribution is made. These have been added when the accommodation has been considered insufficient, or in some cases when existing joint accommodation has been made separate for each house.

Many examples of these improvements for 1913 appear in the tabulated statements given below, but as a financial measure of the work done since the commencement of the work of conversion it may be stated that for the first 1,808 pail closets converted to the end of 1913 the amount of contribution paid by the Corporation was £3,824 4s. 8d., or an average of £2 2s. 4d. per closet, while the total cost of conversions and works connected therewith amount approximately to £12,219. The owners of property have thus spent approximately £8,400 in actual conversion work and works of improvement ; while to this it has to be added that during the same time approximately £1,420 has been spent by property owners in the conversion of privy middens for which there has been no contribution. Thus during the past three years property owners in this Borough have spent on such works of improvement as here indicated approximately £10,000.

SEPARATE PAIL CLOSET CONVERSION.

Additional works carried out with Pail Closet Conversions.

Ref. No. in Register	No. of Houses	PARTICULARS OF WORK.
134	6	Drain properly ventilated ; ashplaces repaired.
220	4	Two closet buildings reconstructed ; new sewer laid in passage ; yard drains reconstructed ; yard walls rebuilt.
221	6	Two closet buildings extended and two ashbins provided ; new sewer laid in passage ; yard drains reconstructed.
230	1	Closet building raised and repaired ; new sewer laid in passage.
231	3	Two closets rebuilt in more suitable positions, and one closet put into sanitary condition ; yard walls rebuilt ; two ashbins provided in wall ; new sewer laid in passage ; yard drains reconstructed ; yard space increased.
232	1	Yard drain reconstructed ; sewer laid in passage.
236	2	Yard drains reconstructed ; sewer laid in passage ; closet buildings raised.
237	1	Yard drain reconstructed ; walls of closet rebuilt ; sewer laid in passage.
238	1	Yard drain reconstructed ; grease gulley provided for bakehouse ; sewer laid in passage.
245	6	New passage sewer provided ; all yard walls, closet buildings, sheds and coal places taken down, and new closet buildings and coal places with wall ash-bins in a new yard wall provided ; yard drains reconstructed ; gulley removed from inside one scullery and placed in open air, and slopstone removed to outside wall ; yard space increased.
246	1	Yard drain reconstructed ; new passage sewer provided ; closet building and yard walls rebuilt ; wall ash-bin provided.
314	6	New passage sewer with intercepting chamber, lamp-eye and ventilating shaft provided ; yard drains repaired ; all old closets and ashplaces taken down ; closets and yard walls rebuilt and wall bins provided ; yard space increased in each case ; passage flagging repaired.
315	2	All drains reconstructed and laid in concrete under premises, two manholes and vent. shaft provided ; closet and ashplace taken down ; closet building provided in suitable position ; ash-bins provided ; one pail closet abolished.
345 to 352	8	New passage sewer with access and ventilation provided ; all yard drains reconstructed ; closet buildings reconstructed.
401	3	Closet buildings reconstructed in suitable positions ; ashplace demolished and galvanised iron ash-bins provided ; yard drains relaid ; yard space increased.
412	2	Yard drains reconstructed ; manhole provided ; rain-water pipe disconnected.
461	9	Closet and ashplace buildings and yard walls taken down ; new closets built in more suitable positions ; coal places provided ; ash-bins fixed ; yards rearranged and yard space increased ; drains reconstructed.
523	2	Two wooden closets abolished ; new buildings in suitable positions provided for W.C.'s ; yard drain repaired ; ash-bins provided.

Ref. No. in Register	No. of Houses	PARTICULARS OF WORK.
526	10	All pail closet and ashplace buildings taken down and yard space increased ; ten water-closets fixed in wash-cellars inside bricked-off space separately ventilated to area. New ashplace accommodation provided in suitable position.
538	12	All ashplace floor flags taken out and floors raised and concreted.
630	4	Main drain reconstructed ; manhole and vent shaft provided ; wooden closets taken down and rebuilt ; common yard reflagged.
631	1	Urinal overhauled ; one additional W.C. provided.
632 to 634	3	Drainage repaired, manhole reconstructed, waste-pipe disconnected from drain.
635, 6	6	Drains repaired, manhole, lamp-eye and vent. shaft provided ; cellar drain abolished ; four rain-water pipes disconnected.
649	1	Drain reconstructed ; two manholes and vent. shaft provided.
654	2 and Workshop	All old closet and ashplace buildings taken down ; three closets built in more suitable positions ; ash-bins provided ; yard space increased ; new drain with manhole provided ; yard wall rebuilt.
657	1	W.C. fixed inside bathroom ; old closet building taken down ; yard space increased ; yard drain and passage sewer manhole made good.
661	1	Scullery rearranged ; new sink provided ; back door to scullery provided for convenient access to W.C.
662	1	Closet rebuilt in suitable position ; ash-bin provided ; old buildings taken down to gain yard space.
663	2	Two blocks of old buildings removed ; closets rebuilt in suitable positions. Ash-bins provided ; yard space increased ; yard drains entirely reconstructed and provided with chambers and vent. shafts.
691	1	Closet building enlarged ; shed removed to increase yard space.
717, 724-6	4	Closet buildings raised and main drain extended.
720	3	Three closets taken down and rebuilt in suitable positions ; ash-bins provided and yard space increased.
722	5	Closet buildings rearranged and roofs raised ; sewer in passage extended ; lamp-eye provided ; manhole inverted and made good.
728-9	14	Closet buildings extended by dividing up joint ashplaces in eight houses ; ash-bins provided for nine houses ; passage drain relaid.
776	3	Closet buildings reconstructed ; joint closet converted ; new drainage system with two manholes, lamp-eye and vent. shafts provided for common yard ; yard reflagged.
784	2 & Shop	Manhole provided to drain ; ashplace floor raised and concreted.
786	3	Portion of disused cottage and block of closets and ashplaces taken down ; resultant space utilised for garden ; three new W.C.'s fixed in suitable chambers inside premises.
811	4	Passage sewer provided in lieu of common drain in yards ; two manholes, lamp-eye and vent.-shafts fixed ; one closet taken down and rebuilt in suitable position ; two closet buildings raised and one re-arranged ; all yard drains reconstructed.
813 to 817	5	Closet buildings re-arranged to secure best position for cisterns.

Ref. No. in Register	No. of Houses	PARTICULARS OF WORK.
819	4	Sewer in passage extended and manhole made good.
822	10	Closet buildings rearranged and roofs raised ; all rain-water pipes and troughing made good.
826	8	New passage sewer provided in lieu of drain passing along yards ; two manholes, lamp-eyes and vent. shafts provided.
829	1	Closet building taken down ; water-closet provided inside premises ; new iron drain laid.
831	1 and Chapel	Block of closets and ashplaces taken down ; three new water-closet buildings provided ; yard space increased ; drain extended and ventilated.
882	1	Closet building extended and roof raised.
903	4	Passage drain laid in lieu of drain passing down yards ; two manholes, lamp-eye and vent. shafts provided ; all yard drains reconstructed.
905	3	Closet rebuilt ; rain-water pipes disconnected.
916	1	Closet building extended.
974 and 1028	9	New sewer laid in passage ; manhole, lamp-eye and vent. shaft provided ; all yard drains reconstructed.
1010 and 1027	5	New sewer laid in passage in lieu of old drain passing through yards ; manhole, lamp-eye and vent. shaft provided ; two closet buildings raised.
1020	6	Closets extended by dividing up the joint ashplaces ; ash-bins provided.
1021	3	Closet buildings extended by utilizing ash-places ; ash-bins provided.
1022	1	Closet buildings enlarged and bin provided.
1024	2	Drain extended and manhole provided.
1029	6	Closet buildings extended by utilizing joint ashplaces ; ash-bins provided.
1030	5	Large block of closets and ashplaces taken down ; three new closets built outside and two W.C.s fixed inside ; ash-bins provided ; yard space increased ; new drainage system constructed and two manholes and vent. shaft provided ; one house provided with a back door.
1034	5	Passage drain repaired and lamp-eye provided ; one yard drain reconstructed.
1044-5	2	Closets in yard abolished ; W.C.s fixed inside bathrooms ; passage sewer extended.
1047	1	Closet in yard abolished ; W.C. fixed inside bathroom ; bath and lavatory rearranged.
1059	1	New length of drain with manhole provided ; closet building rearranged.
1067	1	Yard drains relaid and waste-pipe disconnected.
1132	1	Closet rebuilt in more suitable position ; existing soil-pipe repaired and re-connected.
1161	1	Closet building extended by utilizing ashplace ; ashbin provided ; rain-water pipe disconnected.
41	2	Two closets and ashplace rebuilt.

Ref. No. in Register	No. of Houses	PARTICULARS OF WORK.
85	5	Four old ashpits replaced by galvanized iron ash-bins; passage re-sewered.
92-3	2	Old ashpit replaced by galvanised bins.
323	11	Passage re-sewered; yards redrained; manholes and vent. shaft provided.
434 to 440	10	Passage re-sewered; sewer rendered accessible and ventilated; five yard drains reconstructed.
470-1	2	Yards re-drained.
511 to 519	12	Yards re-drained.
570-1	4	One separate and one joint closet rebuilt; manhole provided to drain.
575	3	One separate and one joint closet and ashplace rebuilt in less obstructive positions; ash-bins provided.
578, 580	7	Two separate and two joint closets rebuilt; ash-bins provided.
585	1	Workshop closet converted; ashplace abolished and bin provided.
704	10	Three closets and ashplace reconstructed.
731, 734	6	Common drains reconstructed, ventilated and manhole provided; one closet rebuilt.
789	2	Yards re-drained.
796	2	Closets enlarged; yards re-drained.
804	4	Yards re drained.
807	1	Pail closet and ashplace demolished; water-closet and ash-bin provided; yard walled in and made private.
832	3	Passage sewer extended; lamp-eye and vent. shaft provided.
955	1	Closet rebuilt; drain under house cut off.
981	3	Passage sewered.
999 to 1001	6	Defective ashpits replaced by bins.
1068—1071	32	Defective ashpits replaced by bins.

CONVERSION OF JOINT PAIL CLOSETS.

Improvement work carried out contemporarily with the work of Conversion.

Reference	No. of Houses affected	No. of Pail Closets	No. of Water-closets Provided	No. of Ashbins Provided	Particulars of Scheme of Improvement.
A.	15	5	8	2	Small common yard provided for accommodation of three new water-closets and new ash-bins, and the yard properly enclosed. Existing closet buildings overhauled.
B.	8	3	4	—	Existing buildings re-arranged; additional closet provided; ashplace put in order; sewer manhole made good.
C.	20	15	16	10	Twelve through houses and eight back-to-back houses. Each through house provided with new water-closet in good position; one new water-closet for every two back-to-back houses; six private yards extended 4ft. 6in. into common yard; sheds removed from yards; new sewer with two manholes, lamp-eye and two vent. shafts provided. All drains reconstructed; common yard and private yards reflagged; sculleries repaired and coalplaces made good; wall ash-bins provided in six cases.
D.	23	11	15	—	Seven through houses and 16 back-to-back houses. Seven yards extended 3ft. 6in. into passage; yard walls rebuilt and new water-closet provided for each through house. One water-closet provided for every two back-to-back houses in such positions as to allow of private yards and passage when houses are broken through; new sewer provided; all drains reconstructed; two manholes, two lamp-eyes and two vent. shafts provided; private yards, passage and common yard entirely reflagged.
E.	25 and Workshop	8	13	13	25 back-to-back houses and one workshop broken through to 12 houses and one workshop; block of eight closets and an ashplace taken down; each house provided with a separate water-closet and ash-bin built inset to leave yard open, and with wash-boiler in scullery. New sewer with manhole, lamp-eye and vent. shaft provided; all drains reconstructed and portion of yard repaved; new window sashes provided to seven houses; all houses done through and fitted with gas.
F.	6	No closet; right of use of one joint closet belonging to another owner.	3	3	Six back-to-back houses. Two semi-private yards with three new water-closets, two coalplaces and three new wall ash-bins provided. Four of the houses are situated in the Wardle Urban District and two in the Rochdale Borough.

Refer- ence	No. of Houses affected	No. of Pail Closets	No. of Water- closets Provided	No. of Ashbins Provided	Particulars of Scheme of Improvement.
G.	Origin- ally 20 now 12	8	8	12	Five unoccupied dwellings and one occupied dwelling taken down ; all closet and ash-place buildings taken down ; site utilized for 9ft. oin. passage and private yards for four houses. Dwellings provided with water-closets and ash-bins, yards flagged and asphalted ; new sewer and drains with three manholes, lamp-eye and two vents. provided. Four houses provided with back doors and windows. Other work now in progress.
H.	3	2	2	—	Two joint closets converted, manhole and vent. shaft provided for drain.
J.	8	3	6	—	Three closets rebuilt ; three additional water-closets provided ; sewer reconstructed.
K.	7	5	7	7	Closets rebuilt ; one W.C. fixed inside ; ash-bins provided.
L.	7	4	5	—	Four closets rebuilt ; one additional W.C. provided ; four yards and common yard and passage redrained.
M.	9	3	5	5	Three closets rebuilt ; two additional W.C.s provided ; ash-bins provided.
N.	4	2	2	2	Two pail-closets and ashpit demolished ; two W.C.s and ashbins provided ; manhole provided to drain.
O.	2	1	1	—	Joint closet converted.
P.	2	1	1	—	One pail-closet demolished and W.C. provided ; ashpit removed from under scullery.
Q.	5	2	3	3	Two pail-closets converted ; one additional W.C. provided ; ash-bins provided.
R.	4	1	2	2	One closet converted ; one additional closet and ash-bins provided.
S.	4	2	2	2	Two pails converted ; ashpit replaced by bins. Common yard redrained and manhole and vent. shaft provided.
T.	2	1	1	—	Pail closet demolished ; W.C. built.
U.	3	1	3	3	Three W.C.s built in place of one pail-closet. Separate yards provided and ash-bins fixed.
V.	8	4	4	—	Four Joint Closets converted.
W.	4	2	3	3	Three W.C.s to replace two pail-closets ; common yard divided into three private yards and ash-bins provided.
X.	4	2	2	—	Two pails converted ; common yard redrained.
Y.	3	1	3	3	Three W.C.s to replace one pail-closet ; common yard divided into three separate yards ; ash-bins provided ; yards and passages redrained.
Z.	16	6	11	11	11 W.C.s built to replace six pail-closets ; ash-bins provided.

MIDDEN PRIVIES.

In the Castleton Moor Ward there still exist 111 midden privies used by the tenants of 161 houses ; 74 of these houses have separate accommodation, while 87 houses are served by privies used jointly by the occupiers of two or more houses. 22 of these privies are remote from sewers and cannot be converted to water-closets.

The following table shows the progress of the conversion of privies during 1913 :—

	No. of Privies	No. of Houses concerned
Notices standing over from 1912	36	39
Notices issued during 1913	33	35
TOTAL ...	69	74
Converted and abolished during 1913	54	57
Notices not yet complied with	15	17

The 15 notices not yet complied with remain on the list for the following reasons :—

Waiting for sewer	5
In hands of Contractors	8
Awaiting other alterations	2
	<hr/> 15 <hr/>

During the last four years 139 of these privies have been converted, and the original number of 250 is reduced to 111.

During 1913 improvements have been effected along with the conversions. The following table gives examples of this :—

Reference Letter	No. of Houses	No. of Closets	WORKS EXECUTED.
A.	6	6	Old privies demolished ; new water-closets and coalplaces erected ; ash-bins provided, yards completely re-drained.
B.	4	1	Additional water-closet provided ; ash-bins provided.
C.	8	8	Groups of closets demolished ; new water-closets built adjoining each house ; ash-bins provided ; drain made accessible and ventilated.

Summary of Present Sanitary Accommodation.

The following statement gives the approximate number of each type of closet in the Borough at the end of the last financial year ending 31st March, 1914, as compared with the preceding four years :—

	Year ending 31st March				
	1914	1913	1912	1911	1910
Pail Closets	14,357	15,555	16,426	16,750	16,789
Fresh-water Closets	5,884	4,138	3,208	2,793	2,488
Waste-water Closets	2,481	2,481	2,481	2,482	2,471
Privy-midden pits	*72	104	125	137	147

* Actual number of closets 111.

Of the 14,357 pail closets, about 6,200 are on the joint pail-closet system, that is, with one closet to two or three houses.

IMPROVEMENT OR DEMOLITION OF INSANITARY DWELLINGS UNDER THE ROCHDALE IMPROVEMENT ACT AND THE HOUSING AND TOWN PLANNING ACT, 1909.

Under the two Acts 22 dwellings have been condemned as unfit for human habitation during 1913. Of these, 8 were dealt with under the local Act, and 14 under the 1909 Act. The following Tables give some particulars in connection with these dwellings.

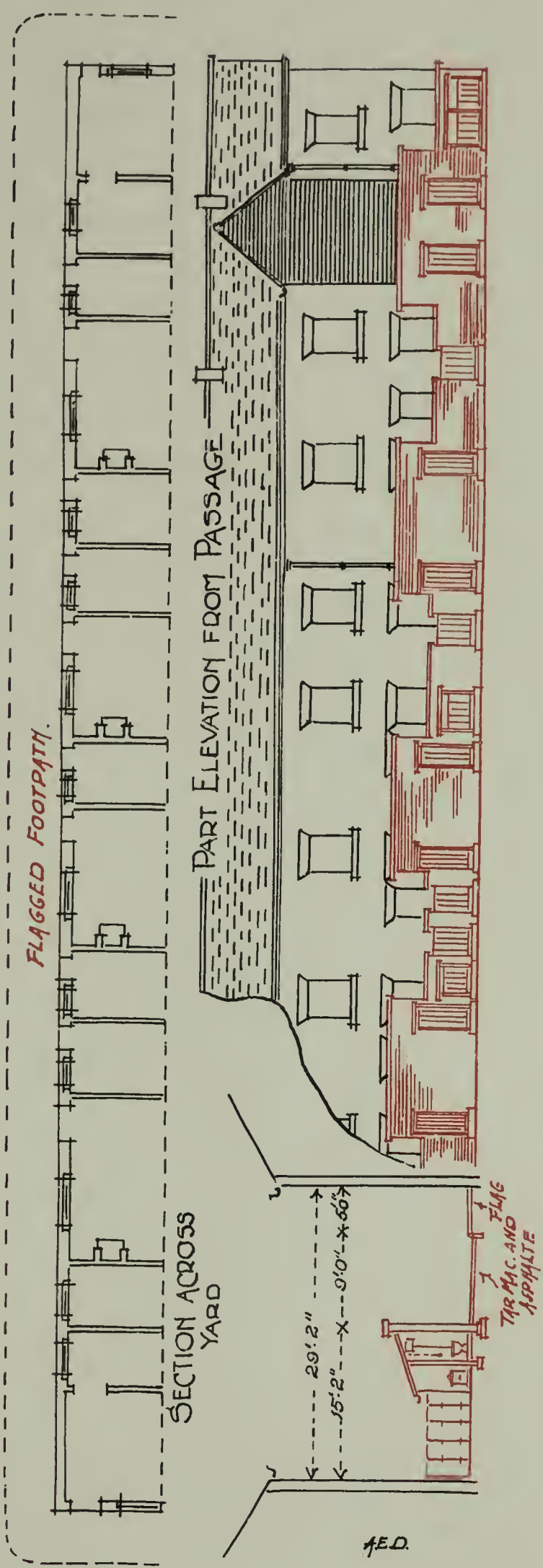
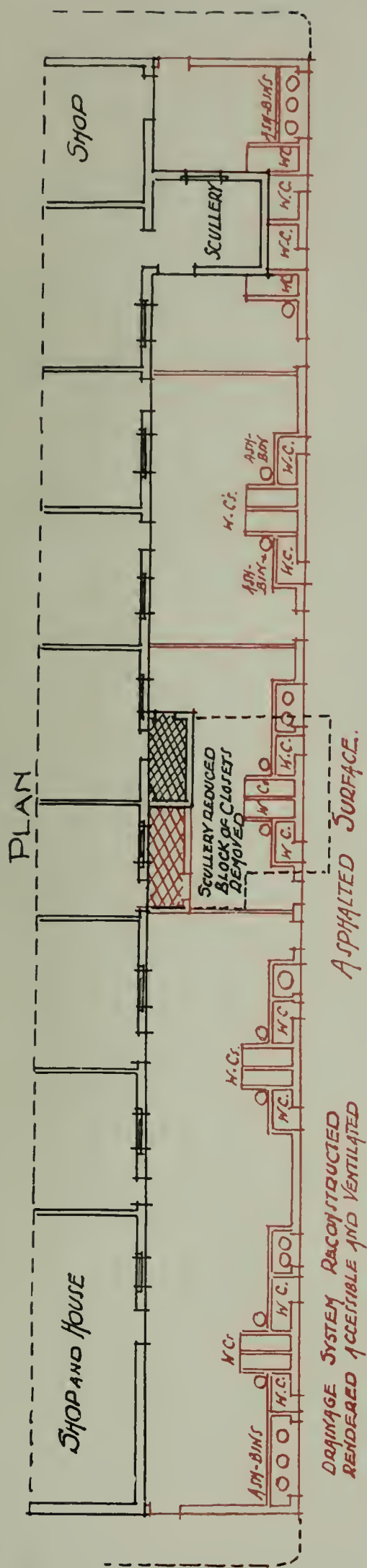
Houses Condemned under Local Act.

Situation of Premises	Date of Closing Order	Subsequent History
Nos. 3, 4, 5 & 6, in No. 2 Court, Tuer Street	March 6	Four back-to-back houses. Since demolished by the owners.
No. 401, Back Halifax Road	June 5	One-roomed dwelling. Since attached to another house.
Nos. 1, 2 & 3 in Tulip Place	Dec. 4	Now unoccupied; to be added to other dwellings above as wash-houses, etc.

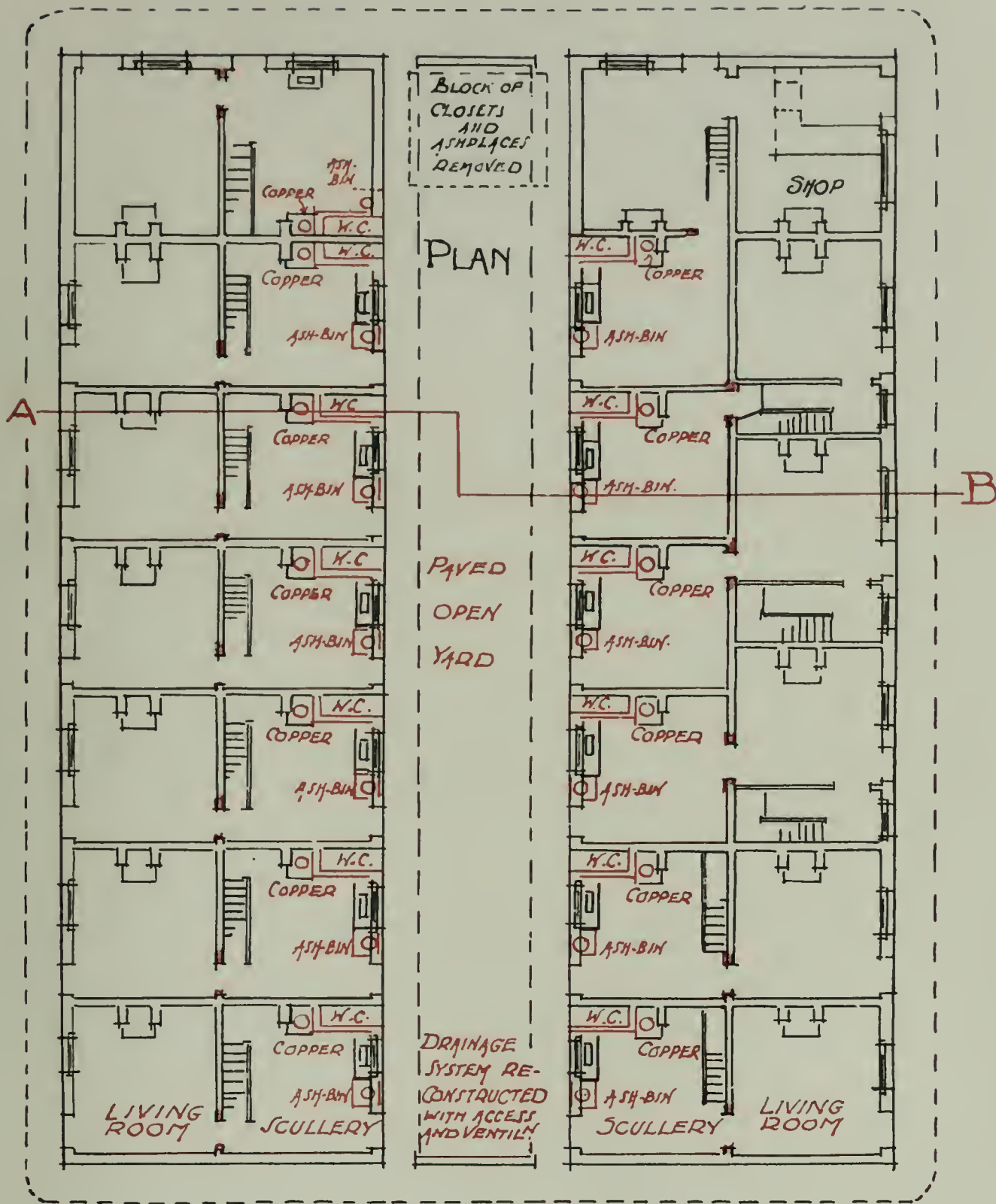
Houses Condemned under 1909 Act.

Situation of Premises	Date of Closing Order	Subsequent History
Nos. 20, 22, 24, 26 and 28, Middle Lane	Dec. 4	No action taken by owner. Demolition orders being arranged for.
Nos. 27 & 29, Middle Lane	Dec. 4	Owner submitted scheme of improvement, which was not approved. Arrangements being made for demolition of these and an adjoining building and the opening up of a cul-de-sac passage.
Nos. 2 & 3 in No. 1 Court, Middle Lane	Dec. 4	No action taken by owner. Demolition order being arranged for.
Nos. 16 & 18, South Lane	Dec. 4	Owner has arranged for these to be converted into a warehouse.
Nos. 1, 2 & 3, Standring's yard	Dec. 4	Arrangements made for the three cottages to be demolished and a portion of the site utilized for new and additional sanitary accommodation for 8 good houses in same curtilage according to plans prepared by this department.

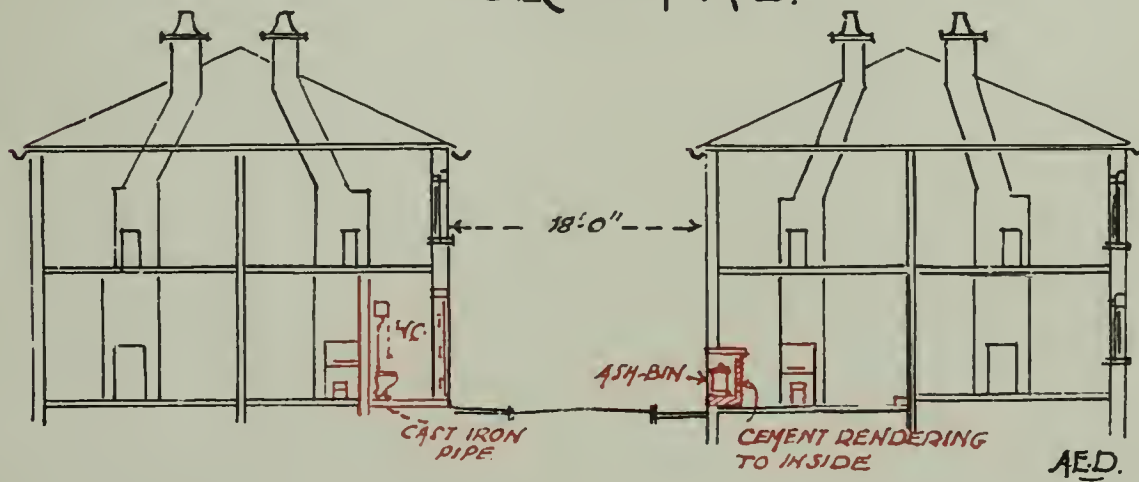
SKETCH N^o 1.



SKETCH N^o 2.



SECTION A.B.



The inspection of 17 of the dwellings identified in the above two tables formed part of an inspection embracing a total of 38 dwellings, which again formed part of a list of dwellings represented to the Medical Officer of Health as unfit for human habitation. The remaining 21 dwellings were dealt with or are now being dealt with as shown in the following Table :—

Situation of Premises	Description of Premises	How dealt with
13 Middle Lane 15, Middle Lane 17, Middle Lane	Dilapidated back-to-back houses, obstructive of light and ventilation of other dwellings	The three dwellings, along with two other contiguous dwellings have been demolished and their sites utilized for private yards and sanitary accommodation for more commodious houses.
19, Middle Lane 21, Middle Lane 3, Luke's Court 4, Luke's Court	Insanitary back-to-back houses in narrow street and court and obstructive of the light and ventilation of other dwellings	Two dwellings unoccupied. Arrangements being made for the demolition of all four, and the utilization of sites for open space and sanitary accommodation for other houses.
8, North Lane 10, North Lane 12, North Lane 14, North Lane	Four cottages " not through " in bad condition and with insufficient sanitary accommodation	Cottages provided with back doors and windows ; yard redrained ; surface asphalted ; 9ft. 0in. passage made at side ; water-closets provided ; cottages repaired and decorated internally.
3, Stansfield Place 5, Stansfield Place 7, Stansfield Place 9, Stansfield Place	" Not through " cottages partly underground at the back	Arrangements are being made for the breaking through of the cottages, the provision of yards, water-closets, &c., the yard surface at a lower level than cottage floors ; and other improvements according to plans prepared by this department.
7, Victoria Place 8, Victoria Place 9, Victoria Place 9, in No. 1 Court 10, off Regent Street 11, off Regent Street	Back-to-back houses in fair condition ; sanitary accommodation insufficient	Owner has consented to break cottages through, provide proper sanitary accommodation, and to carry out other suggestions of the Health Department.

Other schemes of housing improvement have been carried out in connection with the pail-closet conversion scheme and not under the Housing and Town Planning Act. The attached sketches, Nos. 1 and 2, form typical examples of the work which is being done contemporarily with closet conversion work.

Sketch No. 1 represents the arrangement carried out in two blocks of property belonging to the same owner. The original arrangements consisted of a row of shops and houses fronting on to a main thoroughfare, with a second row at the rear fronting on to an ordinary street, with however, four inset cottages facing the common yard between the two rows of houses. This common yard was unpaved and usually in a muddy and filthy condition, and contained a large block of closets and ashplaces used by all the tenants in common. The scheme of improvement has embraced the demolition of the block of closets and part of an outstanding scullery ; the resewering and redraining of the whole premises ; the division of the common yard into two parts, viz. :—a 9ft. 0in. wide asphalted space with a 5ft. 0in. wide flagged footpath, and a 15ft. 0in. wide space divided into flagged yards for the better property ; the provision of twenty water-closets with dry ashbins, all in convenient positions. Provision has been made with regard to the closets for the future addition of the inset cottages to the other dwellings.

Sketch No. 2 illustrates a second scheme. The original arrangements consisted of two rows of two-roomed back-to-back houses not in very good condition. Altogether there were 25 houses and one workshop. The two rows of cottages were divided by a narrow common yard, at one

end of which stood a large block of closets and ashplaces, obstructive of light and ventilation. The back-to-back houses have been converted into through houses, the block of closets has been demolished, the premises have been entirely redrained; a water-closet and an ashbin has been provided for each house in such a position as not to be obstructive, the houses have been provided with better windows and have all been redecorated inside. The yard surface has been repaved.

HOUSING AND TOWN PLANNING WITH SOME NOTES ON THE HOUSING PROBLEM.

In our Report of last year, 1912, we stated that this Corporation had under consideration two Town Planning Schemes. The smaller, the Marland Scheme, embracing about 63 acres, which is now passing through its final stages, and it was hoped that building operations might be begun during this summer. The second and large Scheme embraces about 1,600 acres on the western side of the Borough, and is still in the initial stages. It includes portions of neighbouring districts and the land of many different owners, and consequently negotiations appear protracted. But it may be found possible to make progress with the less contentious portions while keeping in view the whole. I also adverted to a local scheme of much interest represented by the Spotland Building Company which is supported by the large firms of S. Turner & Co. and Turner Bros. Limited, by means of which these firms provide good substantial houses at a cheap rent for many of their workpeople. Also during the past year there has been formed another Housing Company, The Passmonds Estate Co. Ltd. This Company has secured building land in a favourable situation, and are at present erecting working-class houses in considerable numbers on approved plans with the purpose of selling or renting on reasonable terms.

It was not our purpose to advert to this problem in the present report, but in view of the urgency of the problem and the universal interest manifested in its solution, not only by Parliament but by numerous Conferences in which were represented all shades of opinion, the moment appears opportune to look backwards and review our own contributions towards this solution, when thrown in the light of contrast with all that has been said from hundreds of platforms and in so far as any real progress has been made. In January, 1911, we published our Housing Report with some Notes on Town Planning, and in the Annual Reports for 1910, 1911, and 1912, were included articles dealing with the Housing and Town Planning Act, and Housing of the Working Classes Acts, and with the question which is very much discussed at present—Co-operative and Co-partnership Housing.

In the Annual Report for 1912, pp. 50-55, we ask the pertinent question: How is the acknowledged shortage of houses to be remedied, or under what system is the work of the private builder to be supplemented, and we discuss the question in some detail under three headings:—

I.—Municipal Building under the Housing of the Working Classes Acts.

II.—Company Building and Co-operative Society Building (which includes building by these Societies registered under the Industrial and Provident Society Act).

III.—Private and Company Building on land acquired by the Corporation.

Each of these systems has had its exponents and advocates, and all have been tried with varying results. But on this occasion we ventured to elaborate a scheme under III.—a Co-operative scheme on Co-partnership principles. Briefly the method to be adopted constituted an appeal to the Industrial Co-operative Societies, whose members were to form themselves into a Public Utility Society for the purpose of erecting dwellings on Co-partnership lines, on land to be rented from the Corporation. The Corporation were to borrow money for the purchase of suitable building land on the easy terms on which only they as a Local Authority are empowered to borrow. The Society were to borrow two-thirds of their required capital from the Public Works Loan Commissioners and one-third from the Industrial Society and to limit their dividends to 5 per cent. It is then interesting and refreshing at this stage of the controversy to turn to what must be considered the most recent and important contribution of this problem.—The Report of the Land Enquiry Committee, in two volumes, made during 1912-1913, by a small Committee appointed by the Chancellor of the Exchequer.

Vol. II. deals with urban conditions, and all such aspects of this problem as enumerated under I., II. and III. above, which we have dealt with in our reports, are here more fully and very fairly discussed, with very comprehensive summaries of the salient features and important facts ; and it is of peculiar interest to find that our earlier arguments and conclusions have found strong confirmation from the authors of this volume, who were in a position to base their conclusions from a great mass of evidence collected from all parts of the Country. As evidence of this parallelism of argument and conclusion, I will here only make one extract from Chapter V. on Co-partnership Housing :—The authors, after pointing out the powers already possessed by Local Authorities under the already existing Housing of the Working Classes Acts, also points out what they term “ certain crippling restrictions ” in these Acts. They recommend that these restrictions, which have hitherto prevented the letting on lease of developed sites for purposes other than the erection of working-class dwellings by Local Authorities, should be removed, and that Local Authorities should be encouraged to purchase and develop building land and to lease the sites to private builders or Public Utility Societies.

The combination of the public ownership and development of building land with private and co-operative building enterprise offers several advantages worth considering :—

- (1) The fact that land compulsory acquired by the local authority at a fair price was being offered on reasonable terms to builders would tend to prevent the price of other building land in the locality from rising to an unreasonable figure.
- (2) In addition to exercising such control over the laying out of estates as it possessed under Town Planning powers, the local authority would have more power to control the design and construction of the houses themselves.
- (3) Since it would be to the interest of the authority to facilitate in every possible way the erection of good houses at a low cost, it would charge ground rents covering only the purchase price of the land, the cost of road-making and sewerage, and other expenses, without additional profits ; and builders would thus have the advantage of obtaining individual sites at what may be termed wholesale prices.
- (4) The increment in the value of the land would ultimately go to the community.

The above illustrates the principle upon which all Tenant Co-Partnership Societies are founded. That it is a sound one is obvious ; for not only have the tenants a direct interest in contributing to the success of the enterprise, but as a rule they have some voice in the management of the estate without being limited in their mobility as they would be in the case of absolute ownership of the houses they occupy.

Again in Chapter V., page 103, after summarising the recent rise and progress of Co-operative Industrial Societies, in so far as they have invested funds in house property ; and on the one hand retained control or management of such property ; or on the other hand advanced funds on agreed terms to their members who usually find part of the purchase money and may afterwards gradually acquire possession by repayment or otherwise, the following paragraph appears :—

“ Moreover, as even co-operative housing enthusiasts admit, the quality of dwellings provided by such enterprise in the past has often been little superior to that of dwellings built by speculative enterprise. In so far as they are willing to retain the ownership of houses built with their capital, and are content with a low return upon the capital invested, co-operative societies undoubtedly have before them a considerable field of socially useful activity in the provision for their members of dwellings of an improved type ; and from the growth of the movement in recent years there is reason to anticipate a large increase of activity in this direction.”

I venture to think the suggestions we made to Co-operative Industrial Societies of which this town is a stronghold, is even more appropriate. For, although at the inception of such institutions the founders had undoubtedly in their minds the ideals of certain mutual benefits by co-operation, I am not so sure but that in this age of commercial enterprise a good balance sheet providing a good dividend is not considered of equal or even more importance and acceptable than the retention of the primary ideal of co-operation. But is it not still possible in so far as

housing is concerned, to retain something of the primary ideal of mutual benefits on a sound and economic basis? although we do not for a moment, as it would be unreasonable, expect co-operative societies to become philanthropists in matters of housing.

Accordingly, in our Report for 1912, we outlined a scheme whereby members of any Co-operative Society could constitute themselves into a Public Utility Society, and conduct the business of providing houses on sound economic Co-Partnership principles, and such as would provide a reasonable return for funds invested.

The concrete example of a housing scheme put forward in that report might be taken as some guidance of the methods to be adopted, though the rates of interest for money borrowed were hypothetical for the reason that at that time it was expected that further financial assistance would very shortly be given to Public Utility Societies by the State; and there is little doubt that such will shortly be the case. Indeed, in the Land Enquiry Report a suggestion is made that the Government should lend 85 per cent. of the capital instead of two-thirds. As, however, there would be greater risk, a larger rate of interest would be necessary, and it is questionable whether any great advantage would accrue to the Societies. What many would like to have seen suggested, and what was anticipated, would have been an extension of the period of loan from 40 to 60 years for Public Utility Societies, putting these Societies on the same basis as far as borrowing powers is concerned as the Local Authority, and without any increase in the rate of interest. Sixty years is not an unreasonable life to expect from houses built by a Co-Partnership Society any more than from those built by a Local Authority, and such a Society can give good security; indeed the houses would last much longer than 60 years, and when their value was written off would form a valuable asset to the Society.

We still believe, that, even failing any such concessions, it is possible to carry out a sound scheme of housing on the lines already suggested in our Annual Reports, though, unless the period of loans is extended, and owing to the increase of rates in Rochdale, a slightly higher rent than 7/6 weekly would now be necessary to give the return suggested in the 1912 Report.

Municipal House Building.

The conclusion arrived at in this Report is as follows:—"Reviewing the situation as a whole, there is little doubt that some extension, and possibly a considerable extension, of municipal enterprise may be looked for in the future; but, after full allowance is made for this, it may safely be assumed that, for a long time to come, the great bulk of new dwellings will be provided by private and co-operative enterprise in one form or another." With this we agree, but of much significance is the following extract from this Government Report, inasmuch as the same views have been already put forward in our Annual Reports for 1911 and 1912. For, not only are our views as regards the policy which should be adopted by Municipalities as regards matters of housing in general agreement, but they are the views we still hold:—"Often a Local Authority might fulfil its obligations in other ways. Where, for instance, the high cost of building land was an important cause of the shortage, it might purchase land compulsorily, and, after making roads and sewers, lease sites for the erection of working-class dwellings to private builders. By providing additional means of cheap and rapid transit it could multiply the area of available building land and lower its cost. It could stimulate the enterprise, not only of private builders, but of Public Utility Societies, by taking up mortgages at reasonable rates of interest, or it might subscribe that portion of the capital which these societies cannot borrow from the State. In connection with town planning schemes it could so regulate its requirements as to cheapen the cost of development for purely residential areas." Every Municipality should thus exhaust every resource before embarking on the policy of house-building, for this, as every one knows, raises many arbitrary questions, which cannot be discussed here. But even as a last resort, if a municipality finds it advisable, or even necessary, or even compulsory to provide working-class houses at a fair economic rent, surely with all their advantages the houses ought to be provided at no greater but even at less cost than by the private builder; and therefore on this and other grounds we have always failed to see why any municipality should suffer any loss on house-building which is conceived and carried out on sound and economic principles and under a good Town Planning Scheme.

THE POVERTY PROBLEM IN HOUSING, OR HOW TO PROVIDE SANITARY AND SATISFACTORY HOUSES FOR THOSE WHO ARE ACTUALLY UNABLE TO PAY ECONOMIC RENTS FOR SUCH HOUSES.

We now treat briefly on what to many appears to be the crux of the Housing Problem, and around which in recent years there has centred so much discussion, that not infrequently the forest appears to be lost sight of for viewing the trees, and hence from many platforms and a voluminous literature the modes of solution are as diverse as numerous, but seldom practicable. Recognising this the two great political parties of the State have each espoused a Bill; and hence there are before the country at this moment Bill (A) and Bill (Z), each of which is supposed to be able to achieve the same purpose and solve the problem of the housing of the poor. Briefly, the principle adopted in Bill (A) is to make annual grants from the Treasury to Local Authorities in order that they may provide houses below cost price for all families who, through misfortune or poverty, are unable to pay an economic rent for a satisfactory house. In Bill (Z) on the other hand, it is proposed in general terms to establish a minimum wage, and thereby raise the economic position of the worker, with the hope that he may provide himself with adequate housing accommodation. In both Bills I think it must be admitted there is some deviation from the economic principles which have formed the basis of the operation of the Law of Supply and Demand of all commodities in the past. Hence, as regards Bill (A) the chief argument will no doubt turn on the rightness or wrongness of the principle of subsidising low wages by the State; whereas, as regards Bill (Z) the chief arguments will probably have reference to the equity of the establishment of the minimum wage principle. For it must be admitted at once that in the natural order of things all men never were nor never indeed can be equal. One man is dear at any wage, while another is cheap at a high wage. Further, granted a minimum wage, how can any guarantee be provided that any increased wage will be spent in the provision of better housing accommodation. In previous reports we have dealt with this poverty problem in housing, and we are convinced that it requires to be analysed with very great discrimination. For all who appear poor are not poor, and certainly many of those who live in what is termed slum property are not by any means poor. During the investigations made for the purpose of the Housing Report, particulars of the means of families living in 122 back-to-back houses in one of the worst and most congested and insanitary districts in this Borough were carefully ascertained and verified from different reliable sources. It was found that only a very small percentage actually occupied such dwellings by reason of honest poverty. In many cases the reason given was that suitable vacant houses could not be found even at 1/- or 2/- more rent per week; and in many others the reason given was that they occupied such houses because they were situated at a convenient distance from their work. But 51 per cent. of these families frankly admitted being in a position to pay more rent for a better house.

Now we have pointed out in previous reports wherein lay the solution of this problem without any contravention of any of the natural laws of economics. All true and lasting reforms must have their spring and origin and final basis of conviction in the minds of those who are to be reformed or benefited. Accordingly, in this crusade for the better housing of the people, who should be the most interested—The State, the Municipality, or the Working Man himself? Surely the working man, yet I venture to think the average working man gives the matter the least thought. If only the working men of England could but recognise:—

- (1) That in any improvement of the housing conditions they have their own responsibilities and part to play no less important than the State or the Municipality;
- (2) That we are passing through a transitional period in which no one has gained more than the working man himself. Through the pressure of combination and otherwise higher wages and shorter hours of labour have been obtained. This is right and just in so far as it can be obtained without the injury of our industrial progress or the injury of our international commerce; and in so far as the British workman thereby utilises these improving conditions to make himself more efficient and of greater service to his employer. But at the same time the British working man must recognise that the inevitable result of this is to raise cost of production and distribution of every manufactured article; and consequently

as a satisfactory cottage is a finished article its rent must rise in proportion. Hence the rents must rise, although they should do so in a reasonable manner in any well-managed State or Municipality, because after all, in the ultimate, the adequate housing of the people is the concern of both.

In this respect it is regrettable that the teaching of the Church, the School, and half a century of Public Health administration have not been sufficient to impress on many working men the truth so well expressed in that well-known song "Home, sweet home"; and that it would confer immeasurably greater benefits on their wives and families and themselves, and be by far more economical in the end to spend one or two shillings more a week in rent for better houses and correspondingly less on pleasures of often doubtful utility.

But now let us suppose that the national and social conscience is being awakened as regards the iniquities of bad housing in the past, and that the great mass of working men and artisans are now becoming convinced that they must shake off the inertia inborn of long-continued habits of living in insanitary and inadequate houses, what are the first symptoms we might expect to see of this great awakening? Surely and naturally a great movement upwards of all those who can afford to pay a reasonable rent for a satisfactory house. Although as to what constitutes a satisfactory home no hard and fast standard can be adopted. But, let us say, that if all the working men and artisans in Rochdale whose weekly salaries range from 50/- to 60/- per week were to adopt a general standard of house accommodation such as the three bed-roomed house and bath, with two living rooms and scullery, and small front and back garden, such as outlined in our reports and indicated above at rentals from 7/6 to 8/- per week including rates, then the Housing Problem in Rochdale, I venture to think, would probably diminish to small dimensions. For the gradual effect would be that, when the Housing Problem is solved in so far as it can be by the operation of the ordinary laws of economics and ethics, the solution of what is termed the crux of the Housing Problem—the adequate housing of the poor or those who cannot pay an economic rent—follows as a natural sequence. For the gradual upward movement of those who can and ought to help themselves will tend to provide plentiful supply of the cheaper class of house which could often be made fairly comfortable for the poorer classes.

Such then in outline would be a natural and real solution of the housing problem, without involving any contraventions and without the aid of any subventions, but by the will and conviction of the people, and in that respect real and lasting; and I have not the least hesitation in predicting that working men themselves would be the first in the future to appreciate the wisdom of such a movement, and in days to come marvel that they for so long denied themselves, their wives and their children, such comforts of life and living as only can be provided by a satisfactory house, and that they were so slow to learn that a bad house is bad economy and is fraught with danger to both soul and body.

Now follows the last question, is there available at present or likely to be in the near future an adequate supply of such sanitary and satisfactory houses in order to meet and encourage this movement? The answer at present is in the negative. But was any genuine demand ever created for any commodity, which it was found that the ingenuity of the commercial world failed to supply; and further, in providing a house the working man has in his option several methods of procedure. He can negotiate direct with the private builder, who will gladly erect cottages on such standard and at such rentals as we have already indicated. But on the other hand, and more important in this respect, has the working man not already learned the use and power of combination in securing higher wages, shorter hours, etc.? Why not then use the same principle in endeavouring to ameliorate his own housing conditions. Why do the thousands of working men in Rochdale who are members of various Co-operative Societies not utilise the resources of such Societies for the provision of their own houses; or better still for this purpose for the members of such Co-operative Societies to constitute themselves into Public Utility Societies, and with all the advantages to be gained therefrom carry out a programme of housing such as we have suggested and given concrete examples. There is room for two or three such Societies to be formed in Rochdale, and for each to build a few hundred houses, and each man to take an interest in his own house. By such means the

working man can secure that he gets the best standard house at standard cost ; and further secures that any increasing demand for a better house shall not merely have the effect of raising the rents of any such available houses.

But, while indicating the responsibilities and part which the working man might be expected to play in his own redemption from bad to better housing conditions, every Corporation as the Guardian of the people has also no less but even greater responsibility. Every Corporation through its official eye should be in the position of outlook in the watch tower and interpreting the future from the past, be ready to seize every opportunity to germinate, encourage and support all such movements as have for their aim the amelioration of the people and the development of its municipal cosmos.

Already in this article, in the Housing and other reports, we have indicated in what direction in our opinion Local Authorities should interpret their responsibilities. They might be expected in the first place to avail themselves of all powers conferred in virtue of the Housing of the Working Classes Acts, but more especially of the recent Housing and Town Planning Act. Through these Acts they can acquire land, develop, regulate so as to cheapen transit, on good town planning lines, and thus be able to lease, or otherwise to arrange for good building sites, on more reasonable terms than can usually be obtained by the private individual or the private builder ; and thereby stimulate while directing such a great and desirable movement as we have outlined, and only as a last resort, when all other means have failed, embark on the policy of house building.

Many Corporations are presently engaged in house building, and the question is discussed from many points of view ; for which class should a Corporation provide housing accommodation, and what type of house should be built. Should a Corporation provide houses for those who can pay an economic rent or for those who cannot ? From the trend of thought and reasoning adduced in this article, I think it should be a matter of serious deliberation before any Corporation embark to any extent on a policy of building cheap houses at an uneconomic rent ; although in some cases it might be found advisable both on public health and humanitarian reasons to provide a few small blocks of tenement houses for old people and those who have unfortunately fallen or been driven into the undesirable condition of occupying rooms let in lodgings and such like conditions. For it is the common experience that the occupants of such places are on a dangerous incline, which by sheer descent, leads to the next door—the Workhouse. It is on such reflections that we often hesitate to condemn houses occupied by elderly people with small limited resources, if, by such closing, such poor people have to lead their melancholy way to worse conditions. Such procedure does not relieve but rather aggravates all the evils of overcrowding, and tends to accelerate the arrival at the Workhouse through the half-way stages of the rooms let in lodgings and the common lodging-house. Whatever housing policy is adopted it must be constructive in character, and must be built up on solid reason and solid procedure. It must have for its central aim and object to help every man to help himself to obtain a satisfactory and sanitary home on the most reasonable terms ; and by careful discrimination consider the wisest policy in making provision for those who are unable to pay an economic rent, but for whom in the interests of public health and humanity some provision must be made.

EDUCATION COMMITTEE.

REPORT

ON

**The Medical Inspection of
School Children.**

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Introductory.

Mr. Chairman, Ladies, and Gentlemen,

The following is the Sixth Annual Report upon the Work of School Medical Inspection carried out in Rochdale, in terms of the Education (Administrative Provisions) Act of 1907 and the various memoranda issued from time to time by the Board of Education.

In carrying out the work of medical inspection referred to, the staff has made considerably over 32,000 inspections during 1913.

It is satisfactory again to be able to report the continued improvement in the personal cleanliness of the scholars, together with the continued increase in the number of defects remedied. The percentage of dirty heads discovered under the head cleansing scheme has dropped to 23.6 in 1913, as against 27 per cent. in 1912, 31.4 per cent. in 1911, 44.3 per cent. in 1910, and 62.8 per cent. in 1909; whilst 61.2 per cent. of the defective children re-examined during 1913 had received treatment, as against 50.4 in 1912, 41.6 per cent. in 1911, and 24 per cent. in 1910.

The feature of the year under review, however, has been the decision of the Education Committee to establish a Dental Clinic for the free treatment of bad teeth, a defect so common amongst Rochdale school children. It is likewise the intention of the Committee to erect a Day Open-air School for the combined treatment and education of debilitated and pretubercular children. These two departures, which are so urgently needed, will well repay the community by the diminution of preventable ill health amongst the juvenile population, who in a few years will be Rochdale's adult workers and ratepayers.

Up to the present time the efforts of medical inspection have been directed mainly to the recognition of defects, and to their treatment as far as possible. Many defects are, however, preventable, and it is quite illogical to spend money upon the treatment of preventable disease without at the same time ensuring that everything possible is done to prevent such disease. Now, many of the defects recorded in the present report as occurring amongst school children could have been prevented through right care in infancy. For example, Rickets and its many deformities is due to the ignorant feeding of children during the first two years of life upon starchy instead of fatty foods. Again, many permanently delicate school children owe such delicacy to their digestive organs having been permanently upset by infantile diarrhoea, also a preventable disease. And many similar examples could be given, did space and the occasion permit, all showing that a large number of the physical defects discovered amongst school children are due to ignorance and neglect in infancy of such simple hygienic principles as lay the foundation of a healthy life.

As a first step towards remedying this unsatisfactory state of affairs, it was recommended in the 1911 report that a course of instruction in personal hygiene be given to all scholars in the Borough elementary schools, and a graduated syllabus of such a course was appended. The free access of fresh air, the value of suitable plain food and sufficient rest, and the abundant use of soap and water to the person and surroundings briefly sum up the course. It was also recommended that the elder girls, who will be the mothers of the next generation, should receive such instruction as it is possible to give in the principles of infant care and management. The establishment of Crèches for the care of infants whose mothers had to earn a livelihood in the mills or elsewhere, and to serve as centres for instruction in infant care and management, was also suggested. Such Crèches would be largely, if not entirely, self-supporting, and, as was mentioned in the 1911 annual report, might with advantage to the community be municipalised. It is here interesting and satisfactory to note that in the recently proposed Government grants to Local Authorities provision is made for the establishment of baby clinics, and these could best be held at suitably placed baby Crèches.

Once again we have to compliment the school teachers upon the excellent manner in which they have performed the various duties devolving upon them in connection with the work of school medical inspection. To the School Nurses we are likewise indebted for their continued loyalty and for the help they have given in the preparation of this as well as the various monthly reports. We have also to acknowledge the valuable co-operation and assistance, always so willingly rendered, of Mr. Holden, the local Secretary of Education, and his various assistants.

Before proceeding with the more detailed work of the report, which has been drawn up on the lines of the previous reports, it is customary to mention here the following general statistics.

Population of Rochdale in 1913	...	...	...	...	...	...	93,420
Number of Scholars on Register during 1913	...	...	...	...	...	...	14,107
Average Attendance (including half-timers) 1913	...	...	...	...	...	...	12,150
Number of Schools—Council	...	...	...	...	...	...	18
Non-Provided	...	...	...	...	...	...	13
							<hr/> 31
Number of Departments—Council	...	...	...	...	...	...	31
Non-Provided	20
							<hr/> 51
Number of School Buildings—Council	18
Non-Provided	16
							<hr/> 34

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SECTION I.

The general hygienic conditions of the school buildings.

Full details of the hygienic condition of the Rochdale School Buildings are to be found in the five preceding annual reports. To cover the ground a sixth time would serve no useful purpose, and it only remains in the present report to mention under this section the improvements carried out and arranged for during the year under review.

Improvements Carried out.

Castleton Council (New Infant Dept.)	...	Buildings nearing completion.
St. James' C.E. School (Thornham)	...	Playground extended and boundary rebuilt.
Baillie-street Council School	... ..	New heating installation completed ; surface of playground recovered.
Heybrook Council School	... ..	Surface of girls' and infants' playgrounds recovered.
Greenbank Council School	... ..	Surface of playgrounds recovered.
Meanwood Council School	... ..	Work of improving the playgrounds now in progress.

The interiors of the following eight schools were decorated throughout, viz. :—

Meanwood Council School.	St. Alban's C.E. School.
Baillie-street Council School.	St. Mary's C.E. School (Wardleworth).
Newbold Council School.	St. Mary's C.E. School (Balderstone).
Brimrod Council School.	St. Patrick's R.C. School.

Also the outside woodwork of Castlemere Council School, Penn-street Council School, Spotland Council School and St. John's R.C. Council School was repainted.

Improvements arranged for.

Lowerplace Council School (New School).	Site approved ; plans ready for submission to Board of Education.
Parish Church Infants (New Infants' School)	... .. Plans now approved.

School Desks.

Again would we draw attention to the unsuitability of the combined desk in use in many Rochdale schools, and to the desirability of replacing these where possible by the dual desk now universally in use.

SECTION II.

General survey of the scope of the work.

1.—Visits to Schools.

112 visits have been made to the 31 schools in the Borough by the Medical Inspector for the purpose of routine examination. To this number has to be added 14 special visits in connection with outbreaks of infectious disease, making a total of 126 visits to the schools during the year by the Medical Inspector.

2.—The Children examined were selected as follows :—

A.—For Medical Inspection in School.

(a) Routine Cases.—Children admitted to school for the first time since the 1912 medical inspection, and those children who had reached the age of 12 years during the same period. These two groups of children are commonly known as "Entrants" and "Leavers."

(b) Special Cases.—Any other children in the school not included in the above two groups, who, in the opinion of the Head Teacher, required medical examination.

(c) Re-examination of children found defective at the previous inspection, to ascertain whether treatment had been obtained, and if so, its effect.

B.—For Medical Inspection, at the School Clinic.

(a) Children who were found to require further examination than could be carried out in school.

(b) Children referred for examination as to their fitness for school by either the teachers or School Attendance Officers, owing to absence through sickness or physical defects.

(c) Children treated at the School Clinic.

(d) Children referred to Dr. Harry for defective vision.

C.—For Inspection by School Nurses with regard to Cleanliness.

(a) All girls in attendance at Rochdale Schools.

(b) All boys presented by the teachers.

3.—The Number of Children inspected in 1913.

A.—Seen at School.

During the year 4,735 children were examined in school. The relative numbers of Routine Cases, Special Cases and Re-examinations are shown in the following table, which also brings out the age and sex distribution of the Routine Cases.

TABLE I.
Number of Children seen at School for Medical Inspection.

AGE	ROUTINE CASES									Specials	Re-examined	Totals
	3	4	5	6	7	8	12	13	Totals			
BOYS ...	121	271	390	137	37	...	719	48	1,723	456	243	2,422
GIRLS ...	129	261	393	155	45	...	652	53	1,688	402	223	2,313
TOTAL ...	250	532	783	292	82	...	1,371	101	3,411	858	466	4,735

B.—Seen at the School Clinics.

1,890 children in all were examined at the School Clinics during 1913, as against 1,316 in the previous year. 868 at the Examination Clinic, 680 at the Treatment Clinic, and 342 at the Eye Clinic. The 868 children made 1,946 visits to the Examination Clinic, and comprised 100 children referred for further examination than could be carried out in school and 768 children presented with regard to their fitness for school.

The 680 children treated paid 6,983 visits to the Treatment Clinic.

C.—Seen by School Nurses.

6,242 children were seen at school by the School Nurse in respect to cleanliness. All the schools were examined three times, and the Nurses have, therefore, 18,726 inspections to their credit.

4.—The Number of Inspections made during 1913.

32,732 inspections were made by the whole staff in 1913. This number, which does not include either the special inspections of children at school on the outbreak of epidemics, or the home visits paid by the Nurses, was made up as follows :—

Number of Inspections	by Doctor at School	...	...	...	...	4,735
"	"	by Doctor at Examination Clinic	...	...	...	1,946
"	"	at Treatment Clinic	...	...	...	6,983
"	"	by Eye Doctor at Eye Clinic	...	...	...	342
"	"	by School Nurses as to personal cleanliness	...	...	...	18,726
Total Number of inspections						32,732

5.—Parents and Medical Inspection.

The attitude of parents generally towards medical inspection has undoubtedly changed for the better during the past few years. Sympathetic and keen interest has taken the place of their initial lukewarmness, and it is satisfactory to be able to report that a large number of necessitous parents have voluntarily consulted the School Doctor as to the necessity of obtaining treatment for their children. Nine persons only objected to the inspection of their children during the year under review.

6.—Personal History of the children examined.

It is of the utmost importance that the School Doctor should know the illnesses from which the child to be examined has suffered. Such information frequently directs his attention to some organ which may have been injured by a recent illness, the early recognition of which injury is of vital importance to the child. For example, if a child has recently suffered from growing pains or rheumatism, which are the most common causes of heart disease in children, a special examination is made of the child's heart to see that it is quite sound. Similarly, in the case of cough persisting after Measles or Whooping Cough, the lungs are carefully examined for the presence of commencing consumption.

The knowledge of the previous illness of the child is obtained from a personal history form, which is filled in by the parent of each child to be examined. 91.3 per cent. of the parents filled up and returned the personal history form sent to them, and from these forms the following summary of the previous illnesses of the 3,037 children fully examined has been compiled.

TABLE II.
Summary of Previous Illnesses.

Age	No. Examined		No. of Replies		Measles		Scarlet Fever		Diphtheria		Whooping Cough		Chicken Pox		Rheumatism		Growing Pains		Other Diseases	
	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.
3	121	129	107	110	71	68	5	8	...	1	17	23	16	17	...	1	...	...	4	6
4	271	261	238	231	152	129	10	13	1	1	62	68	52	41	2	5	...	...	12	8
5	390	393	346	331	235	212	25	19	4	3	106	112	81	78	3	4	2	5	30	24
12	719	652	675	640	577	560	96	104	15	20	221	222	151	143	69	80	36	52	50	30
13	48	53	45	50	35	47	8	13	1	1	10	24	11	18	4	13	5	1	2	5
	1549	1488	1411	1362	1070	1016	144	157	21	26	416	449	311	297	78	103	43	58	98	73
Totals	3,037		2,773		2,086		301		47		865		608		181		101		171	
			(91.3)		(68.6)		(9.9)		(1.5)		(28.4)		(20.0)		(9.2)					

Figures in brackets are percentages.

VACCINATION.

At the routine inspection note was taken of the number of children vaccinated. Of the 3,037 children seen 1,263 (41.5 per cent.) showed no vaccination marks or were insufficiently vaccinated. The numbers and percentages of children with the protection of vaccination at the different ages was as follows :—

TABLE III.

	AGE LAST BIRTHDAY.										TOTAL	
	3		4		5		12		13			
	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.
Number Vaccinated ...	54	57	132	131	214	194	474	454	31	33	905 (58·1)	869 (58·3)
Number Examined ...	121	129	271	261	390	393	719	652	48	53	1549	1488
TOTAL ...	250 (44·4)		532 (49·4)		783 (52·1)		1371 (67·6)		101 (63·3)		3037 (58·4)	

Figures in brackets are percentages.

These figures show an increase of 10 per cent. in the number of unvaccinated children when compared with last year's figures. Not one of the many parents spoken to on this subject by the medical inspector could give any definite reason for non-vaccination ; and it is a pity that unthinking people, by choosing the line of least resistance for the time being, should be allowed to place themselves and the community at the mercy of this dreadful scourge.

SECTION III.

Defects discovered.

- (a) Defects found during Routine Examination of "Entrants" and "Leavers."
- (b) Defects found during examination of 825 "Special" Cases.
- (c) Result of Re-examination of 466 Defective Children.

(a) DEFECTS FOUND BY ROUTINE EXAMINATION.

The following Table is a summary of the defects discovered during 1913 by routine examination. The Table shows the numbers and percentages of each defect. Details of the age and sex distribution of the various defects are set out in the appendix.

TABLE IV.

Classification	Name of Defect	1913		
		No. examined	No. with Defect	Percentage
1—General Condition ..	Clothing and Footwear defective	3037	148	4.8
	Malnutrition.....	"	194	6.3
	Uncleanliness	"	491	16.1
	Contagious Skin Disease	"	77	2.5
2—Defects of Mouth ...				
Nose and Throat	Carious Teeth	"	1920	63.2
	Tonsils much enlarged	"	85	2.7
	Adenoids and Nasal obstruction	"	29	0.95
	Glands much enlarged	"	8	0.26
3—Defects of the Eye	External Eye Diseases..	"	73	2.4
	Defective Vision.....	*1472	280	19.0
	Squint	3037	88	2.8
4—Defects of the Ear	Wax in Ears	"	37	1.2
	Discharging Ears	"	64	2.1
	Slightly Deaf	"	12	0.3
	Markedly Deaf	"	5	0.16
5—Defects of the Lungs and Heart	Bronchitis.....	"	75	2.4
	Phthisis.....	"	11	0.3
	Heart troubles	"	46	1.5
6—Constitutional Diseases	Tuberculosis of Bone and Gland	"	6	0.19
	Rickets	"	647	21.3
	Rickety Deformities ..	"	161	5.3
7—Defective Speech		"	17	0.5
8—Mental Condition ...	Backward	"	12	0.3
	Mentally deficient	"	3	0.09
9—Defects of Nervous System		"	19	0.6
10—Deformities Other than Rickets		"	35	1.1
11—Other Diseases and Defects		"	376	12.3

* Only the 12 year old children were examined in a routine way for defective vision.

CLOTHING AND FOOTWEAR.

2.9 per cent. of the children examined were insufficiently clad, and 1.9 per cent. insufficiently shod. One-third more boys showed these deficiencies than girls.

Speaking generally, the children were well clad, the clothes being sufficient, clean, and showing a thriftiness of repair creditable to the parents. Overclothing is the rule rather than underclothing, especially in the better class schools. This is due to anxiety on the part of the parents to guard against chest colds in their children, but any tendency in this direction is more likely to be aggravated rather than diminished by the attempted remedy.

As in previous years, in the poorer schools a fair proportion of the children were wearing boots which had been discarded either by their parents or the older members of the family. This is decidedly bad for the children's feet, and must cause them much discomfort.

MALNUTRITION.

Malnutrition occurred in 194 or 6.3 per cent. of the children examined. In 20 children the malnutrition was directly traceable to underfeeding, and in the remaining 174 cases was associated with enlarged Tonsils, Adenoids, or other nasal obstructions, insufficiency of sleep, defective teeth and rickets.

Open-Air School.

A good many of the children suffering from malnutrition were really unfit for school, but, having regard to their unsatisfactory home conditions, most of them were allowed to remain in attendance.

Such children are a suitable soil for the seed of Consumption, and frequently go to swell the ranks of the physically defective in after life.

This is the type of case suited for combined treatment and education at the open-air school which the Education Committee intend to provide in connection with the Borough scheme for the prevention and cure of Consumption.

CLEANLINESS.

93 out of the 3,037 children examined were found to have their skins very dirty. No record was kept of slightly or moderately dirty children since we recognise that it is next to impossible for a busy parent to keep children punctiliously clean when the playground is often the street or unpaved court.

In this connection we would draw attention to the valuable work which has been done by the fitting-up of school spray baths, both in this country and upon the continent. A suitable opportunity for the introduction of a similar bath now offers itself in Rochdale in connection with the new school to be built in place of Lowerplace School. Personal cleanliness is not only a virtue in itself, but is the foundation of many other good qualities, since from pride and cleanliness of body invariably follow pride and cleanliness of environment.

316 (10.4 per cent.) of the children who underwent routine examination had nits of the head. This is less than the number recorded last year. A few of the children had vermin of the head as well as nits at the examination, and the remainder of the 316 must have had vermin shortly before the time of examination seeing that nits are the eggs of vermin.

The continued satisfactory improvement in the cleanliness of the children's heads discovered by the Nurses under the head cleansing scheme described in Table VIII. has again been maintained during 1913. Stated briefly, the number of dirty heads discovered has fallen from 62.8 per cent. in 1909 to 44.3 per cent. in 1910, 31.4 per cent. in 1911, 27 per cent. in 1912, to 23.6 per cent. in 1913. There are many children who require a notice with instructions for the cleansing of verminous heads each time the Nurses visit the schools, and it is a question as to whether those parents who are the worst offenders in this respect should not now be dealt with under the Care of Children Act.

TEETH.

As in former years, dental caries was the most common defect found amongst the children examined, 1,920 (or 63.2 per cent.) of the 3,037 children seen for routine inspection had one or more bad teeth, and if a dental mirror and probe had been used the percentage would be very much higher.

The question of the preservation of the teeth is now universally regarded as one of national importance both æsthetically and industrially. Bad teeth mean bad health. This subject was fully discussed in the Special Dental Clinic Report printed in full in the Annual Report for 1912. The Education Committee has decided, with the approval of the Education Department who pay half the cost, to establish a Dental Clinic on the lines laid down in that Report. The Clinic will be under the control of a full-time dental surgeon, and should by the diminution of

preventable and avoidable disease arising from decayed teeth repay the town many times over by ensuring better health for the school children, who in after years will be the wage-earners and ratepayers of Rochdale. No charge will be made for the dental treatment provided.

To prevent dental caries is of even greater importance than to cure it. The best preventative is to keep the teeth clean and the gums healthy, and no scheme would be complete which does not ensure that the scholars clean their teeth thoroughly and regularly. Such provision for the care of the teeth throughout school life has, to a large extent, been made in the Scheme of Personal Hygiene submitted in the 1911 annual report. The part of the Hygiene Scheme dealing with the care of the teeth would be under the charge of the school dentist, who might also give a few lectures to the teachers on the Care of the Teeth.

TONSILS, ADENOIDS, AND NECK GLANDS.

85 children (2·7 per cent.) had their tonsils so markedly enlarged as to require their removal, and this enlargement was in the majority of cases aggravated by the presence of adenoids. In addition 29 children (0·95 per cent.) suffered from adenoids or other forms of nasal obstruction, without any marked tonsillar enlargement.

Marked enlargement of the neck glands occurred in 8 children (0·26 per cent.). This condition was associated with broken-out heads, running ears and defective teeth. The number of slightly enlarged glands due to the same causes was very large.

The presence of adenoids and much enlarged tonsils has far-reaching consequences upon the health of the child, and subsequently of the adult. These conditions cause mouth breathing, deafness, middle ear disease, etc. Further, on account of the mouth breathing, the air entering the lungs in such children is neither heated nor purified, and as a consequence these children suffer from chronic bronchitis and other chest complaints, with imperfect development of the chest.

Fortunately the removal of adenoids and enlarged tonsils is easily effected; but if full benefit is to be derived from the operation this must be followed up by daily nasal breathing exercises. Many parents have delayed having their children operated on for these conditions because they think their children are too delicate. This delicacy, however, is due to the presence of the adenoids and enlarged tonsils, and after their removal the children rapidly gain in health.

DEFECTS OF THE EAR.

The following are the defects of the ear discovered during routine examination:—

- (a) EXCESS OF WAX.—37 cases (1·2 per cent.). Instructions were given to the parents of these children to have the ears syringed out.
- (b) DISCHARGING EARS.—64 cases (2·1 per cent.). The treatment of this condition can, on account of its chronicity, best be carried out at the School Clinic, and 36 such cases were treated at the Clinic during 1913.

At one school in particular, 14 cases of discharging ears were found, and a special clinic was held at the school every morning for two months. The ears were syringed out by the School Nurse, and suitable medicaments instilled. The parents of the various children were interviewed by the School Doctor and instructed how and when to syringe the ears at home. The results obtained were most gratifying. Re-examination seven months after showed that 12 of the cases had remained cured, the remaining two cases being *in statu quo ante*.

- (c) SLIGHTLY DEAF.—12 cases. The deafness in these cases was due to nasal or eustachian obstruction.
- (d) MARKEDLY DEAF.—5 cases. None of these cases were so deaf as to be unable to benefit by attendance at school. The deafness in 3 cases was due to antecedent middle ear disease, in 1 case to eustachian obstruction, and in 1 case was congenital in origin.

EXTERNAL EYE DISEASES, INCLUDING SQUINT.

Only 73 children (2·4 per cent.) had external eye diseases. The most common form of external eye diseases was Blepharitis, or inflammation of the margins of the eye lids, a condition which is usually associated with filth, or due to some error of refraction.

88 children (2·8 per cent.) had marked squints, all due to errors of refraction. These cases were referred to Dr. Harry for spectacles. Many parents do not realize the absolute necessity in such cases for the provision of suitable spectacles, for without spectacles the vision of the squinting eye is lost from disuse. The spectacles frequently cure the squint altogether, but, if not, they at least conserve the vision of the affected eye, a matter of the greatest importance to the child should the other become blind through accident or otherwise later in life.

VISION.

The vision of the 12 and 13 year old children only was tested at the routine examination. 280 children (19 per cent.) had distinctly bad vision, and in 285 (19·3) per cent. the vision was subnormal. Such cases of bad vision as required spectacles were referred to our Eye Specialist (Dr. Harry), whose special report is included later under Section IV.

DEFECTS OF HEART AND LUNGS.

Bronchitis.

75 children (2·4 per cent.) of the children examined had Bronchial Catarrh. In 29 cases the catarrh was secondary to mouth breathing, either habitual or due to enlarged tonsils and adenoids, and in 31 cases was secondary to rickets. The Bronchitis in the remaining 15 cases was of the primary variety.

Phthisis (Tuberculosis of the Lungs).

11 children (0·36 per cent.) were found during routine examination to be suffering from this disease—8 cases in the very early stage and 2 in a more advanced stage of Consumption.

Heart.

In 46 children (1·5 per cent.) organic heart lesions were discovered. 30 of the lesions were slight and gave rise to no untoward symptoms. In the remaining 16 cases, however, the lesions were more extensive, or so imperfectly compensated as to cause symptoms of distress upon violent exertion. In the latter type of case instructions were given to the teachers excluding from drill or regulating drill and physical exercises, and those parents who were unaware of the existence of the heart trouble in their children were interviewed by the School Medical Officer.

TUBERCULOSIS.

Tuberculosis, both pulmonary and non-pulmonary, is now a notifiable disease under the Public Health Tuberculosis Regulations of 1912.

The notifications received during 1913 show that amongst the Rochdale children of school age :—

18 suffered from Pulmonary Tuberculosis (Consumption) ; and
73 suffered from Non-Pulmonary Tuberculosis.

The 73 non-pulmonary cases comprised 28 cases of Tubercular Neck Glands, 19 cases of Tuberculosis of the Bones, 3 cases of Abdominal Tuberculosis, and 5 cases of other forms of Non-Pulmonary Tuberculosis.

There is much difference of opinion as to the incidence of consumption amongst children. Some medical men aver that consumption is extremely rare, whilst other authorities hold that as many as 15 per cent. of the children in elementary schools present signs of this disease. It is now, however, generally admitted that children are peculiarly susceptible to tuberculosis, and that this has not hitherto been recognised owing to the atypical course and the modification in physical signs and symptoms which the disease often presents in children as compared with adults.

It is essential for the extermination of this disease that the early treatment of tuberculous children should receive attention. Education, when adapted to the physical state of the child under favourable conditions can be maintained during, and is beneficial to the cure of Phthisis. That being so, Education Authorities must play an important part in the national scheme for the prevention and cure of tuberculosis by the provision of special Sanatorium Schools, residential or otherwise. This is the view of the Board of Education, which body is prepared to make special grants towards the establishment of Sanatorium Schools. The Rochdale Education Committee are considering the question of opening a Day Open-air School in the vicinity of our local Sanatorium, if it is decided to erect one, for the combined treatment and education of pretubercular children. The treatment of children with established Consumption would be undertaken at the Sanatorium.

Arrangements might also be made for the treatment of suitable cases of non-pulmonary tuberculosis at the local Sanatorium.

RICKETS AND RICKETY DEFORMITIES.

486 children (16 per cent.), upon examination, were found to be suffering or to have suffered from Rickets in a minor degree, and 161 children (5.3 per cent.) to such a degree as to cause such marked deformities as Knock Knee, Bow Leg, and Rickety Chest.

The cases of Rickets were fairly evenly distributed over all classes of schools, but the deformities occurred chiefly in those schools attended by children from the poorer quarters of the town.

Rickets is a preventable disease, which manifests itself from the first six months to the end of the second year of life. The disease is due to bad infant feeding, and especially when such bad feeding is accompanied by want of fresh air and sunlight. Breast-fed babies seldom suffer from Rickets, but those children who through necessity or ignorance have been deprived of a sufficiency of fresh milk and given large quantities of food in which starch has taken the place of the milk fat are exceedingly likely to develop the disease.

Bottle feeding of infants is the rule in Rochdale. Amongst the better-class working people there is too common use of patent foods and condensed milks, which probably accounts for the prevalence of minor cases of Rickets in the better-class schools. In the poorer-class districts, where the infants are nursed out owing to the mothers having to work in the mills, the infant feeding is in very many cases deplorable.

Rickets tends to a natural cure, as the percentages are reduced amongst the seniors. This is fortunate. But after making due allowance for such tendency to natural cure, this preventable disease exacts a continuous heavy toll through the physical deformities of which it is the cause. Nor must we forget that the deformity of the female pelvic bones caused by this disease in childhood is a common cause of obstructed and difficult labour in adult women. Such obstructed and difficult labour frequently results in the death of the child whilst endangering the life of the mother. The prevention, early recognition and correction of Rickets is therefore of primary importance.

The prevention of Rickets, like its kindred problem the prevention of Infantile Mortality, can only be effected by care and right management in infancy. Unfortunately the knowledge of such care and management is seldom acquired in very many homes. By the teaching of " Infant Care and Management " to the elder school girls, who are the mothers of the next generation, on the lines laid down in the syllabus given in the 1911 report, we might reasonably hope in time to diminish not only the high rate of infantile mortality, but also the large amount of unnecessary ill health and physical suffering, including Rickets, caused by neglect in infancy.

In the two previous annual reports we have recommended the opening of Crèches for the care of infants whose mothers have to work in the mills or elsewhere, and as centres for the practical teaching of infant care and management. Such Crèches would be largely self-supporting, and their establishment may now be possible with the aid of the Government Grant proposed to be handed over to local authorities for the setting up of baby Clinics.

DEFECTIVE SPEECH.

17 children (0.55 per cent.) had defects of speech. Of this number 7 were stammerers, and will receive instruction at the Cure of Stammering Class. 4 children had "infantile" speech, which will become normal as the children grow older. 5 children had a marked lisp, and 1 a burr.

MENTALLY DEFECTIVE CHILDREN.

15 (0.49 per cent.) of the 3,037 children examined were mentally defective. Of that number 3 were entirely uneducable and fit for an imbecile home. The remaining 12 were possibly educable to some extent at a special class or school for mentally defective children.

In the absence of other provision for these mentally defective children, the majority have, where possible, been allowed to attend the elementary schools, with no real educational benefit to themselves, and their presence has been the cause of much anxiety to the teachers. The long promised legislation to deal with the care of these unfortunate children would now appear to be near accomplishment.

At the present time local education authorities possess the power to provide special accommodation for mentally defective, physically defective and epileptic children, but they are not compelled by law to make such provision.

Further legislative changes are proposed, and a Government measure is now under consideration to make it compulsory for school authorities to provide sufficient accommodation for all mentally defective children who are educable. The Bill has already passed its third reading in the House of Commons. Special schools providing accommodation for 13,000 mentally defective children already exist, and it is estimated that 12,000 additional places will be required.

DEFORMITIES OTHER THAN RICKETY DEFORMITIES.

21 children (0.69 per cent.) suffered from the following deformities :—

Cleft Palate	...	...	...	3 cases	Spinal Curvature (lateral)	...	9 cases
Deflected Nasal Septum	...	...	...	6 "	Club Foot	...	2 "
					Wry Neck	...	1 "

HEIGHTS AND WEIGHTS.

The average heights and weights of the children weighed during 1913 are given in the following Table, together with the averages for 1908-10-11-12 inclusive, for the purpose of comparison.

TABLE V.

	CHILDREN 5—6 YEARS OF AGE				CHILDREN 12—13 YEARS OF AGE			
	BOYS		GIRLS		BOYS		GIRLS	
	Height (inches)	Weight (lbs.)	Height (inches)	Weight (lbs.)	Height (inches)	Weight (lbs.)	Height (inches)	Weight (lbs.)
Av. for 1908-1910 incl.	40.62	38.89	39.9	36.64	53.82	70.11	54.29	71.06
Averages for 1911.....	40.59	38.8	40.75	38.15	53.90	70.05	54.15	70.80
Averages for 1912.....	40.65	37.5	40.54	38.8	54.75	70.5	54.88	70.1
Averages for 1913.....	40.65	38.4	40.15	36.6	53.90	70.5	54.37	71.4

(b) DEFECTS FOUND AMONGST THE "SPECIAL" CASES.

This group comprises all children attending school, not included amongst the "entrants" and "leavers," who, in the opinion of the Head Teacher, require Medical inspection. The inspection of "specials" is of primary importance. Apart from the obvious gain which ought to result from the treatment of the defects discovered, the examination of these children ensures that pressure can with more certainty be put upon the parents of children who habitually keep their children from school without sufficient reason, and that the feeble are exempted from tasks beyond their strength.

858 "Specials" were presented for examination during the year. 33 suffered from no obvious defect, and the conditions found in the remaining 825 were as follows:—

TABLE VI.
Classification of "Special Cases" Defects.

Classification	Name of Defect	Number
1.—General Condition	Uncleanliness	7
	Contagious Skin Diseases	32
2.—Defects of Mouth, Ear and Nose	Enlarged Tonsils (much)	13
	Adenoids and Nasal Obstruction	36
	Mouth Breathers	90
	Enlarged Neck Glands	4
3.—Defects of the Eye	External Eye Diseases	27
	Defective Vision	358
4.—Defects of the Ears and Hearing	Wax in Ears	11
	Discharging Ears	28
	Defective Hearing.....	53
5.—Defects of Heart and Lungs	Heart Disease (Organic)	8
	Bronchitis	1
6.—Defects of Nervous System ...	Chorea.....	4
	Other Defects	4
7.—Mental Defects	Backward	15
	Mentally Deficient	11
	Epileptic	2
8.—Constitutional Diseases	Rickets	20
	Rickety Deformities	1
	Tuberculosis of Skin, Glands and Bone...	6
9.—Deformities other than Rickets	Deflected Septum—Cleft Palate, Infantile Paralysis, &c.	7
10.—Defective Speech		42
11.—Other Diseases	Sore Throat	
	Chicken-pox	
	Anæmia	1
	Unclassified	40
	Phthisis	4

(c) CHILDREN RE-EXAMINED.

Of the 900 children due for re-examination, 466 were seen. This discrepancy is explained by the fact that a large proportion of the children examined at the age of 12 become full-time workers at the age of 13, with the result that little or no opportunity for re-examination exists. A special endeavour was made to have the largest possible number examined under these circumstances, and 466 children were re-examined.

In the following Table are shown the defects treated and untreated of the 466 children re-examined.

TABLE VII.

Report on 466 children re-examined.

Defects from which these 466 children suffered	Total Number of Defects	Number Treated, and :—		Number not Treated
		Better	Cured	
Skin Diseases	23	16	7	...
Teeth	137	41	23	73
Nose and Throat—				
Enlarged Tonsils	121	40	30	51
Nasal Obstruction.....	63	30	10	23
External Eye Diseases	31	21	5	5
Vision	2	1	...	1
Ears—Purulent Discharge	48	17	19	12
Wax	16	8	3	5
Heart	8	7	...	1
Lungs	1	1	...	...
Rickety Deformities	31	24	4	3
Other Diseases	21	13	1	7
TOTAL	502	219	102	181 (38.8%)

The 1913 percentage of 38.8 for cases untreated is a decrease of 10.8 per cent. on the 1912, and 26.4 per cent. on the 1910 percentage. This shows that steady progress is being made, but much still remains to be done in this respect.

SECTION IV.

Review of the methods available for the prevention and treatment of disease.

Under this heading fall (a) The Work of the School Nurses ; (b) The Work of the School Clinics ; (c) The Feeding of School Children ; and (d) The Control of the Spread of Infectious Diseases in Elementary Schools.

(a) THE WORK OF THE SCHOOL NURSES.

By carrying out the Head Cleaning Scheme and making Home Visits, the School Nurses play a most important part in the work of medical inspection. The enormous improvement in the cleanliness of the children during the last four years speaks well for the energy and enthusiasm of the nursing staff. An important factor, and one which must not be overlooked, contributing to the great increase in cleanliness shown by the figures given below, is the hearty spirit of co-operation and sympathy which exists between the Teachers and Nurses.

Head Cleansing.

The School Nurses have visited all the schools three times during 1913. 18,726 inspections of girls' heads were made during these visits, and the relative proportions of clean and dirty heads discovered at each visit are shown in the subjoined Table. 459 verminous children were followed up in their homes.

TABLE VIII.
Personal Cleanliness as found by School Nurses at the Inspections of all the Girls in each School.

1912	Number of girls examined	Number Clean.	Number Verminous and Nitty	Number of Cards sent	Number of Homes Visited
1st Inspection	6,174	4,560 (73·8)	1,614 (26·1)	1,023	140
2nd Inspection	6,249	4,771 (76·3)	1,478 (23·6)	970	210
3rd Inspection	6,303	4,967 (78·8)	1,336 (21·1)	740	290

Numbers in brackets are percentages.

The gain in cleanliness shown by the figures for the last five years is as follows :—

Year	1909	...	...	62.8	per cent.	had nits or vermin,	and	37.2	per cent.	were clean
„	1910	...	...	44.3	„	„	„	55.7	„	„
„	1911	...	...	31.4	„	„	„	68.6	„	„
„	1912	...	...	27.0	„	„	„	73.0	„	„
„	1913	...	...	23.6	„	„	„	76.3	„	„

and when it is mentioned that the standard for cleanliness is considerably higher now than in 1909 (probably from 10 per cent. to 15 per cent. higher) you will see that there is all the more reason for congratulation.

Home Visits.

1,201 homes have been visited by the Nurses during the year for the purpose of making more effective the work of medical inspection. The Nurses explain the necessity of obtaining medical advice ; stimulate the parents to greater cleanliness ; and also assist and advise the mother when domestic attention rather than medical treatment is required. Of the 1,201 visits made

640	were concerning	Dirty Heads
162	„	Contagious Skin Diseases
399	„	Defects discovered at inspection

(b) THE WORK OF THE SCHOOL CLINIC.

Through the extension of the scope of the School Clinic to provide for the treatment of necessitous scholars suffering from the most common communicable school diseases, your School Clinics now comprise the following departments, viz. :—The Inspection Clinic, the Eye Clinic, and The Treatment Clinic.

Hours of Attendance.

The Inspection Clinic is held from 2 to 5 o'clock every Monday afternoon on which the schools are open, and during these hours the School Doctor, assisted by one of the School Nurses, is in attendance.

The Eye Clinic is held every Friday afternoon, from 2 to 5 o'clock, and is conducted by Dr. Harry, the Eye Specialist, who is assisted by the other School Nurse.

The Treatment Clinic has been held every morning, at 9-0 (Sunday of course excepted) and the work of treatment is carried out by both School Nurses, under the direction of the School Doctor.

THE WORK DONE AT THE INSPECTION CLINIC.

The Inspection Clinic has been established for the following purposes :—

- (a) The examination of children as to their fitness for school, or as to their fitness to undertake physical exercises, swimming, &c.
- (b) For the further examination of scholars referred by the Doctor from the school inspection.
- (c) The supervision of children suffering from infectious diseases and of "Contacts."
- (d) The periodic supervision of Phthisis.
- (e) The examination of candidates for admission to Special Schools, *i.e.*, Deaf and Dumb, Mentally Defective, &c.

During 1913, 868 children attended the Inspection Clinic, and made 1,946 visits. 100 of this number were cases referred for further examination than could be carried out at school.

The remaining 768 children seen at the Clinic were sent by the Teachers, Nurses, and Attendance Officers, and many were brought by the parents on their own initiative. The diseases these children suffered from were :—

Ringworm	...	...	198 cases	Other Skin Diseases	...	23 cases
Impetigo	...	...	56 „	External Eye Diseases	...	60 „
Scabies	...	...	25 „	Other Diseases	...	104 „
Eczema	...	...	113 „	Defective Vision	...	160 „
Infectious Dis. and Infectious Dis. Contacts	...	...	...	...	...	129 „

THE WORK DONE AT THE EYE CLINIC.

457 children were referred to Dr. Harry, and of that number 115 did not come for various reasons. A good proportion of the 115 has already been examined during 1914.

Of the 342 children actually examined by Dr. Harry, 316 required and 26 did not require spectacles.

The following Table gives the age distribution of the children treated.

TABLE IX.

Age Summary of Eye Cases.

	AGE LAST BIRTHDAY.													TOTAL
	3	4	5	6	7	8	9	10	11	12	13	14	15	
Number examined	32	23	31	46	45	38	45	75	7	...	...	342

As was to be expected from the fact that only the "leavers" had their vision tested at the routine examination, the largest number requiring spectacles occurs amongst the 12 year old children. All the cases below 12 requiring spectacles were presented by the teachers as "special" cases, and the selection of such a large number of cases (representing probably the majority of cases of defective vision in the rest of the school) reflects great credit on the observation of the teachers.

In the following Table are classified the particular defects of vision discovered by Dr. Harry

TABLE X.

Defects found amongst the Eye Cases examined by Dr. Harry.

DEFECTS	AGE AND SEX						All Ages of each sex		TOTAL
	3 and 4 years		5 to 9 years		10 to 13 years				
I.—REFRACTION ERRORS—	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
Hypermetropia	27	37	22	21	49	58	107
Myopia	5	1	9	6	14	7	21
Simple and Compound Hyper-	33	44	25	40	58	84	142
metropic Astigmatism.....	4	4	12	14	16	18	34
Simple and Compound Myopic	5	8	6	8	11	16	27
Astigmatism							
Mixed Astigmatism							
Total Number with Refraction	74	94	74	89	148	183	331
Errors									

DR. HARRY'S REPORT.

“ 342 children were brought up for examination. Of these 249 (or 70 per cent.) were cases of Hypermetropia or Hypermetropia astigmatism, 55 (or almost 30 per cent.) were included under the heading of Myopia or Myopic astigmatism, the remaining 11 cases (corresponding to about 3 per cent.) were suffering from diseases of the back of the eye, the wearing of glasses for which would produce little or no benefit.

“ The percentages of the defects treated are practically the same as those of the previous year.

“ A gratifying feature from the ophthalmic point of view is the fact that a larger number of ‘ Entrants ’ have been brought up for examination. A large proportion of these are children with some form of squint. This not only reflects the increasing popularity of Medical Inspection, but also seems to prove that the indifference of parents towards this serious defect is lessening. An attempt has been made to impress upon them the importance of following up the condition until a cure has been effected. They are advised to bring the children up for examination in three or six months, according to the severity of the case ; those cases that are not cured by the wearing of the spectacles are recommended to attend at the Rochdale Infirmary for further operative treatment. This, together with the necessary training afterwards, will procure a permanent cure.

“ P. A. HARRY, M.D., D.P.H.”

THE TREATMENT CLINIC.

The Clinic has been established for the treatment of Ringworm, Impetigo, Itch, External Eye Diseases, and Running Ears, etc., all of which conditions interfere to such a large extent with school attendance, and are readily communicable to other children.

The cases have been selected by the Doctor, Nurses, and Teachers, the final selection in each case being made by the Doctor. Only necessitous cases and cases likely to benefit by treatment have been admitted to the clinic.

The Clinic was opened in March, 1912. During 1913, 680 children, who paid 6,983 visits to the Clinic, were treated. 612 were cured. The numbers seen each month were as follows :—

Month	No. of New Cases	No. of Visits	No. discharged
January	71	659	66
February	59	551	52
March	44	380	49
April	58	478	52
May	29	370	44
June	64	629	44
July	77	782	72
August	24	270	40
September	42	286	16
October	63	760	63
November	78	1,050	65
December	71	763	49
	680	6,983	612

The diseases from which the children received treatment were :—

Impetigo	148
Eczenia	43
Dirty Heads	43
Running Ears	36
Inflamed Eyelids, &c.	178
Ringworm	97
Scabies	5
Septic Wounds, Ulcers &c.	100
Minor Accidents	4
Other Ailments	20
Wax in Ears	26

The Clinic has worked smoothly, and there has not been one single case of conflict with any of the medical men in the district.

(c) PROVISION OF MEALS.

The Board of Education having placed the general supervision of this branch of their work in the hands of the School Medical Department, it is now the duty of the School Medical Officer to report annually on the work undertaken in connection with the provision of meals for school children.

During 1913, 14,852 dinners were served to school children, this being the only meal which the Committee deem it necessary to provide. The total cost was £123 15s. 4d., which works out at 2d. per meal.

The number of children attending and the number of meals supplied each month were :—

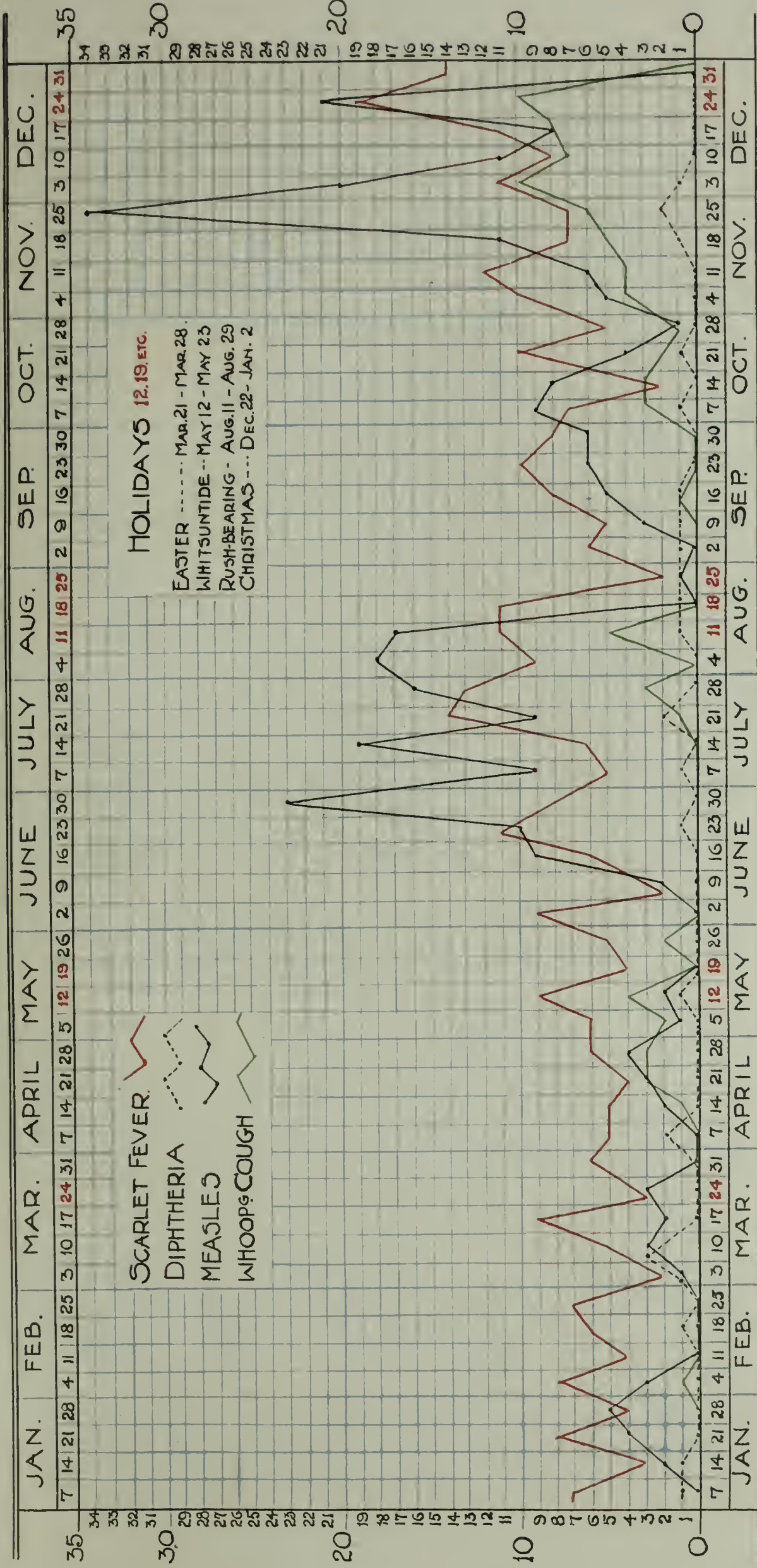
Month	Number of children	Number of meals
January	87	1,451
February	92	1,475
March	91	1,343
April	101	1,553
May	69	749
June	75	1,159
July	79	1,203
August	79	585
September	80	1,076
October	90	1,543
November	84	1,171
December	80	1,544
		<hr/>
	TOTAL ...	14,852

The children are selected in the first instance by the Head Teacher, who forwards the names to the Education Secretary.

Enquiries as to circumstances and means of the parents of the selected children are immediately made by the attendance officers.

The particulars obtained are then submitted to the School Canteen Committee, who decide formally as to the advisability of providing dinners.

WEEKLY NOTIFICATION OF CERTAIN INFECTIOUS DISEASES DURING 1913.



No scale of poverty qualifying for free meals has been adopted, the particular circumstances of each case being carefully considered.

The dinners were supplied by eight refreshment Caterers, at eight convenient centres throughout the Town. Each of these centres has been visited, and the food examined by the School Medical Officer.

(d) THE CONTROL OF THE SPREAD OF INFECTIOUS DISEASES IN ELEMENTARY SCHOOLS.

The numbers of cases of infectious diseases notified during 1913 as occurring amongst the school children were :—

Scarlet Fever	...	...	383 cases	Chicken-pox	...	...	166 cases
Diphtheria	...	...	25 „	Mumps	...	...	968 „
Measles	...	...	326 „	Ringworm	...	...	124 „
Whooping Cough	...	...	89 „				

The figures for Scarlet Fever and Diphtheria are correct, as these two diseases are compulsorily notifiable by the Doctors. The figures for the other diseases mentioned are approximate, and have been obtained through the School Teachers under the complete scheme for the control of infectious diseases in schools detailed in the 1910 School Report.

The weekly figures for Scarlet Fever, Diphtheria, Measles and Whooping Cough have, as in the previous reports, been charted out in the accompanying chart. The curves correspond to the seasonal prevalence of these diseases in other parts of the Country.

Scarlet Fever.

Along with other parts of the Country generally, Rochdale during 1913 suffered from Epidemic Scarlet Fever. These Scarlet Fever Epidemics visit the town with periodic regularity about every eight years.

The type of disease has been unusually mild, and has rendered the epidemic very difficult of control. In many cases the child has only been very slightly indisposed, and has been allowed to attend school until desquamation has occurred, thus spreading the disease broadcast. Again, even with the doctor in attendance, it has been impossible to diagnose many of the cases until peeling has set in; and the difficulty in diagnosis was increased in many instances owing to presence of some indefinite infection which gave a sore throat with a somewhat measly rash, but no desquamation.

Investigation showed that not infrequently the home isolation of Scarlet Fever cases was imperfectly carried out, the patients being allowed far too much freedom during convalescence. Unfortunately, it is rather difficult to bring the negligent parties to book, as the law requires proof of “wilful neglect” in this respect before convicting.

Measles and Whooping Cough.

326 cases of Measles and 89 cases of Whooping Cough were notified during 1913, as against 1,271 and 405 cases of these two diseases during 1912. Owing to the laxity of home isolation and to the want of sufficient compulsory powers to enforce the same, it is next to impossible to control the spread of these two diseases. This is unfortunate, since both Measles and Whooping Cough are more deadly and serious in their after effects than Scarlet Fever. If parents could only be got to realize these facts, and to call in medical aid and take all reasonable precautions in respect of these two diseases a great step forward would be made.

Chicken-pox.

968 cases of Chicken-pox were notified by the School Teachers during 1913. Chicken-pox is not a serious disease, but on account of the liability of modified Small-pox being mistaken for Chicken-pox the occurrence of this disease is always a matter of anxiety to the Health Authorities on account of the very large number of unvaccinated children in the community.

Mumps.

124 cases of Mumps were notified during 1913 by the Teachers. Although temporarily disabling, this disease, like Chicken-pox, seldom has serious consequences. The 1913 epidemic has been characterised by numerous cases of Mumps of the submaxillary glands, the parotid glands being little if at all affected.

APPENDIX.

Detailed Return showing the Age and Sex Distribution of the Physical Condition of Children Inspected.

Condition	Entrants			Leavers			Total		
	Boys	Girls	Total	Per cent.	Boys	Girls	Total	Per cent.	Total
Total Inspected									
Clothing	754	771	1525	97.4	732	691	1423	96.6	2948
	28	12	40	2.5	35	14	49	3.3	89
Footgear	764	771	1535	98.0	748	695	1443	98.0	2978
	18	12	30	1.9	19	10	29	1.9	59
Cleanliness of Head ...	764	645	1409	90.0	763	549	1312	89.1	2721
	18	138	156	9.9	4	156	160	10.8	316
Cleanliness of Body ...	749	761	1510	96.4	744	690	1434	97.4	2944
	33	22	55	3.5	23	15	38	2.5	93
Nutrition	719	736	1455	92.9	712	673	1385	94.0	2840
	60	46	106	6.7	54	30	84	5.7	190
	3	1	4	0.2	1	2	3	0.2	7
Nose and Throat ...	664	671	1335	85.3	700	620	1320	89.6	2655
	81	83	164	10.4	40	64	104	7.06	268
	33	25	58	3.7	17	10	27	1.8	85
	4	4	8	0.5	10	11	21	1.4	29
External Eye Diseases ...	761	755	1516	96.8	759	689	1448	98.3	2964
	17	20	37	2.3	6	12	18	1.2	55
	2	3	5	0.3	...	1	1	0.06	6
	2	5	7	0.4	2	3	5	0.3	12
Ear Disease	766	769	1535	98.0	724	677	1401	95.1	2936
	9	8	17	1.0	13	7	20	1.3	37
	7	6	13	0.8	30	21	51	3.5	64
Teeth	345	387	732	46.7	211	174	385	26.0	1117
	244	234	478	30.5	344	361	705	47.8	1183
	193	162	355	22.6	212	170	382	25.9	737

[illegible]

SECTION V.**Teachers examined in 1913.****Uncertificated Teachers.**

6 lady and 1 gentleman candidates were examined during the year. All were accepted ; 1 subject to defective teeth being attended to, 1 subject to Committee's decision *re* vaccination, and 2 subject to the satisfactory correction with glasses of defective vision.

Bursary and Pupil Teacher.

16 candidates were examined with the results indicated in the subjoined table.

AGE	Number examined		Accepted unreserv- edly		Accepted, subject to attention to :—						Total Number accepted	
					Teeth		Eyesight		Vaccination			
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
16	2	14	1	5	2	7	1	...	1	5	2	14
17	...	2	...	1	...	1	...	...	...	...	...	2
TOTAL ...	16		6		7		1		6		16	

